ANNUAL INFORMATION FORM

Dated as of March 4, 2020
For the year ended December 31, 2019

SEM AFO
INTERNATIONAL EXPERTISE®
HUMAN ADVOCACY

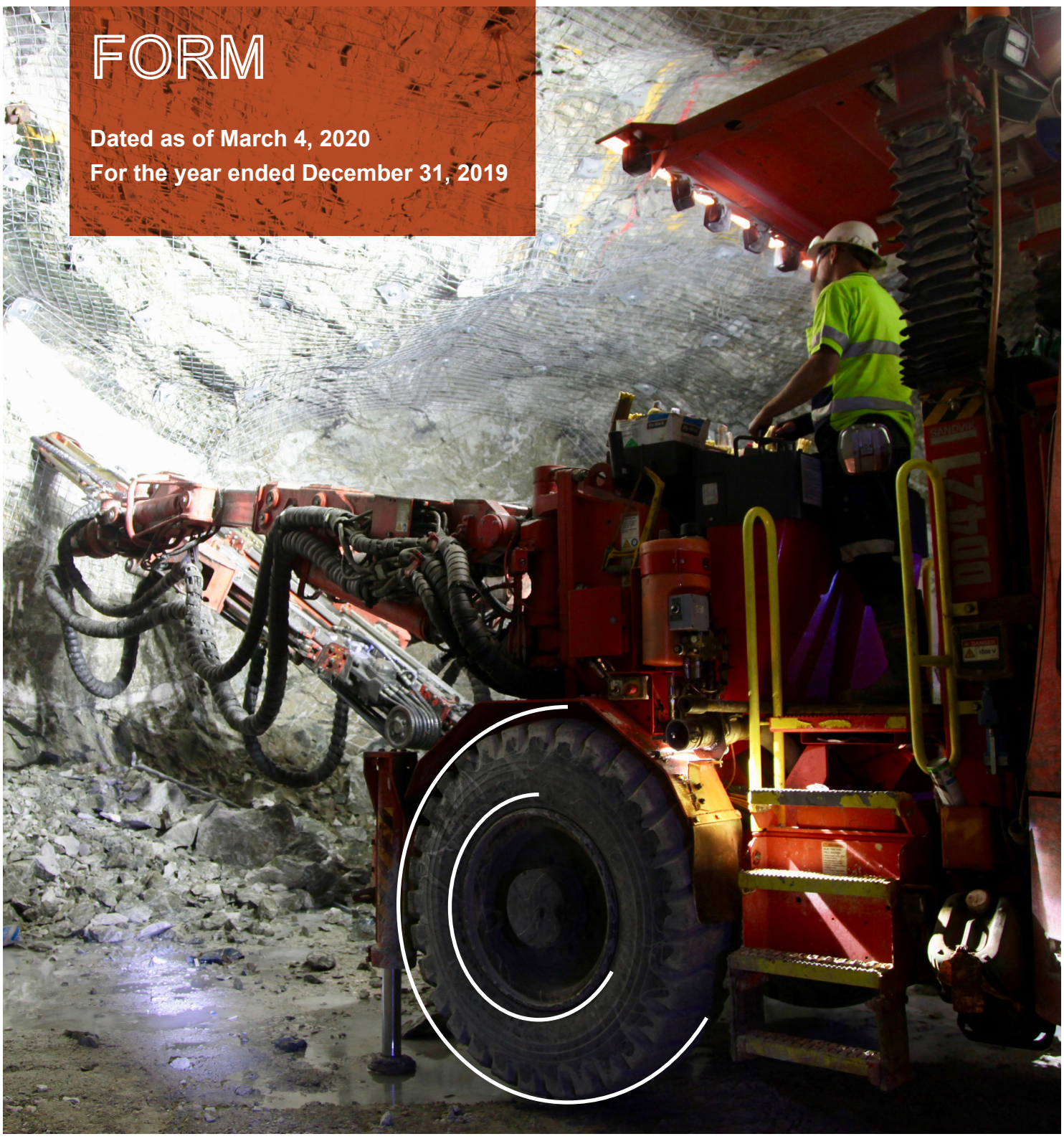


TABLE OF CONTENTS

ITEM 1 – GENERAL MATTERS

Where we say "**we**", "**us**", "**our**", the "**Corporation**" or "**SEMAFO**", we mean SEMAFO Inc. or SEMAFO Inc. and/or one or more or all of its subsidiaries, as it may apply.

This Annual Information Form ("**AIF**") contains forward-looking statements. All statements other than statements of present or historical facts are forward-looking. Forward-looking statements involve known and unknown risks, uncertainties and assumptions and accordingly, actual results and future events could differ materially from those expressed or implied in such statements. You are hence cautioned not to place undue reliance on forward-looking statements. We disclaim any obligation to update or revise these forward-looking statements, except as required by applicable law. For further information regarding forward looking statements contained in this AIF, please refer to ITEM 23 – FORWARD-LOOKING STATEMENTS.

All dollar amounts contained in this AIF are expressed in US dollars unless otherwise specified.

ITEM 2 - THE CORPORATION

Name, Address and Incorporation

Created under the *Companies Act* (Québec) as a result of the amalgamation, effective January 31, 1994 of SEG Exploration Inc. and Orimar Resources Inc., SEMAFO is now governed by the *Business Corporations Act* (Québec) since it came into force on February 14, 2011. Having maintained the corporate name "Exploration SEG Inc." subsequent to the amalgamation, the Corporation changed its name to "West Africa Mining Exploration Corporation Inc." in June 1995. The Corporation further changed its name to its current name "SEMAFO Inc." pursuant to a certificate and articles of amendment dated May 13, 1997. "SEMAFO" is the acronym of "Société d'exploration minière d'Afrique de l'Ouest", the French version of the Corporation's former name.

Our Corporate office is located at 100, boul. Alexis-Nihon, 7th Floor, Saint-Laurent, Québec, Canada, H4M 2P3. The addresses of our principal subsidiaries may be found under ITEM 21 – ADMINISTRATIVE OFFICES.

We are a reporting issuer in Québec, Ontario, Alberta and British Columbia and our common shares are listed for trading on the Toronto Stock Exchange ("**TSX**") since December 12, 1996 and on the NASDAQ OMX Stockholm Exchange ("**NASDAQ OMX**") since October 20, 2011.

Capital Structure

COMMON SHARES

Our capital structure is composed of an unlimited number of common shares and of an unlimited number of Class "A" and Class "B" preferred shares, all without nominal or par value. Holders of our common shares are entitled to one vote for each common share held at all our meetings of shareholders, to participate rateably in any dividend declared by the board of directors (the "**Board**") on the common shares, and, subject to any rights attaching to the Class "A" and Class "B" preferred shares, to receive our remaining property in the event of the voluntary or involuntary liquidation, dissolution, winding-up or other distribution of our assets. As at March 3, 2020, 334,468,873 common shares and no Class "A" or Class "B" preferred share are issued and outstanding.

RIGHTS

On March 15, 2011, the Board adopted a Shareholder Rights Plan (the "**Rights Plan**") that is designed to provide shareholders and the Board with adequate time to consider and evaluate any unsolicited bid made for SEMAFO and to provide the Board with adequate time to identify, develop and negotiate value-enhancing alternatives, if considered appropriate, to any such unsolicited bid.

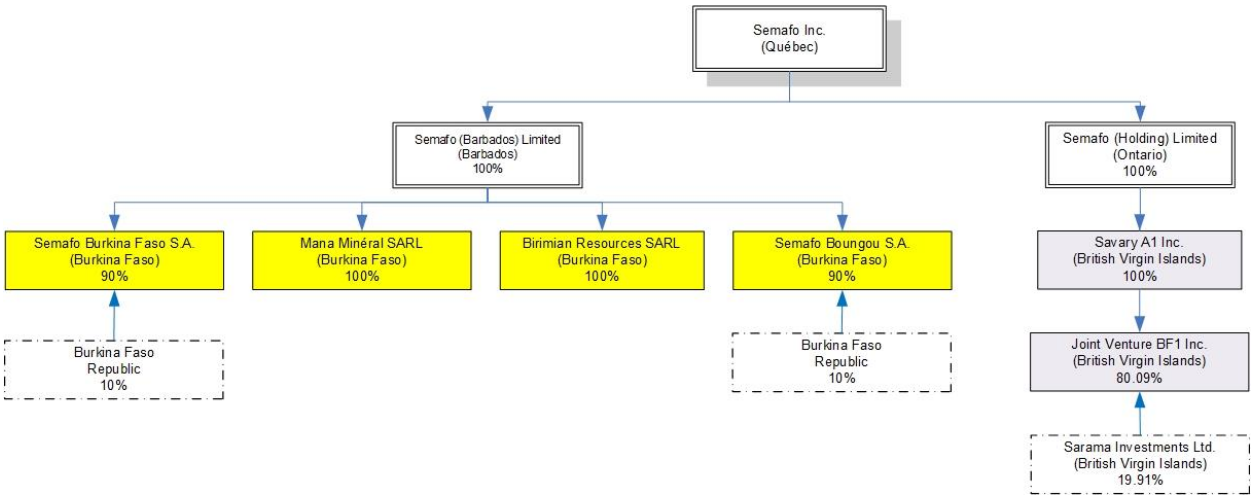
The Rights Plan encourages a potential acquirer who makes a take-over bid to proceed either by way of a "Permitted Bid" (as defined in the Rights Plan), which generally requires a take-over bid to satisfy certain minimum standards designed to promote fairness, or with the concurrence of the Board. If a take-over bid fails to meet these minimum standards and the Rights Plan is not waived by the Board, the Rights Plan provides that holders of our common shares, other than the Acquiring Person (as defined in the Rights Plan), will be able to purchase additional common shares at a significant discount to market, thus exposing the Acquiring Person to substantial dilution of its holdings.

The Rights Plan is initially not dilutive. However, if a "Flip-in Event" (as defined in the Rights Plan) occurs, holders of Rights not exercising their Rights after a Flip-in Event may suffer substantial dilution.

The Rights Plan was ratified at our annual general and special meeting of shareholders held on May 10, 2011, was extended at our annual general and special meetings of shareholders held on May 15, 2014 and was amended and restated at our annual general and special meetings of shareholders held on May 4, 2017. If not reconfirmed at our 2020 annual shareholders' meeting to be held on May 14, 2020, the Rights Plan will terminate at the end of such meeting.

Intercorporate Relationships

The following diagram presents, as at December 31, 2019, the names of our material subsidiaries, where they were incorporated or continued as well as the percentage of votes attaching to all voting securities of each such subsidiary beneficially owned, controlled or directed by the Corporation.



ITEM 3 - GENERAL DEVELOPMENT OF THE BUSINESS

We are a Canadian-based intermediate gold producer with over twenty years' experience building and operating mines in West Africa. We operate two mines, the Mana and Boungou Mines in Burkina Faso. We are committed to building value through responsible mining of our quality assets and leveraging our development pipeline.

Three Year History

2017

On February 1, we provided our 2017 guidance consisting of between 215,000 and 235,000 ounces of gold at a total cash cost of between $585 and $615 per ounce and all-in sustaining cost of between $795 and $835 per ounce.

On April 24, 2017, we announced the revision of our 2017 guidance in relation with our first quarter production results during which the mined grade was adversely affected by the geological interpretation of the upper portion of Zone 9, a mineralized zone in the south-west sector of the Siou pit that was first included in the 2017 mine plan. The upper portion presented a complex geometry as the area comprised the junction of three different zones: Zone 9 itself, and two subsidiary zones known as Zones 55 and 56. This resulted in misleading ore outlined and led to a significant variation in ore mined versus the mining plan. We therefore adjusted our 2017 guidance to between 190,000 and 205,000 ounces of gold, at a total cash cost[1] of between $685 and $715 per ounce and all-in sustaining cost[2] of between $920 and $960 per ounce. The reduction of 25,000 ounces had a minimal impact on our 2017 budgeted cash flow as it was offset by a positive variance between our budgeted gold price for the year of $1,150 per ounce and the then current gold price.

On March 31, 2017, we announced that a ground-breaking ceremony was held for the Boungou Mine in the presence of Mr. Oumarou Idani, Minister of Mines and Carriers in Burkina Faso, who represented the President of Burkina Faso, His Excellency Roch Marc Christian Kaboré. The ceremony was held to mark the beginning of construction at the mine, which has now been named **"Boungou Mine"** after the closest village. Some 2,000 persons attended the event including Burkinabe government officials, representatives from the Canadian government, senior community figures and members, in addition to members of our management team.

On June 20, 2017, we announced that we drew down the incremental $60 million of the senior credit facility as amended on March 29, 2016 (the **"Facility"**) with Macquarie Bank Limited for a total drawdown of $120 million. The recent visits to the Mana and Boungou Mine sites by Macquarie Bank Limited were key conditions for drawing down the incremental $60 million. The Facility is repayable in eight equal quarterly installments of $15 million, starting March 31, 2019.

In addition, we announced receipt of the mining convention for the Boungou Mine from the Council of Ministers of the Government of Burkina Faso, which followed receipt of the mining permit in December 2016. The convention is valid for the seven-year mine life of the initial mineral reserves at Boungou and can be renewed for additional periods of five years.

On August 9, 2017, we reported our financial and operational results for the three-month period ended June 30, 2017 and referred to the Zone 9 issue, following which, our method of grade control was changed from channel sampling to RC drilling. The grade control results for Zone 9 represented the ore expected to be mined from Zone 9 from May through December 2017. Such results were in line with our 2016 reserves and confirmed our expectation that the geometry was simpler and more rectilinear.

On September 18, 2017, we announced that ore mined from Zone 9 in the third quarter continued to provide good reconciliation to reserves.

[1] Total cash cost is a non-IFRS financial performance measure with no standard definition under IFRS and represents the mining operation expenses and government royalties per ounce sold.
[2] All-in sustaining cost is a non-IFRS financial performance measure with no standard definition under IFRS and represents the total cash cost, plus sustainable capital expenditures and stripping costs per ounce.

2018

On February 15, 2018, we announced positive pre-feasibility study ("**PFS**") results at Mana, the addition of 188,000 ounces of reserves, primarily at Siou underground, and an increase of 203,000 ounces of reserves at Boungou.

On May 17, 2018, we announced that commissioning of the Boungou Mine process plant was underway, with the first ore scheduled to be introduced to the mill circuit by month-end.

On May 24, 2018, we announced the signing of a mining services contract with *African Underground Mining Services* ("**AUMS**") to provide turnkey mining services for Siou underground. The mining services contract has a term of 70 months. The economic terms of the mining services contract are consistent with the economics presented in the Mana pre-feasibility study filed on SEDAR on March 29, 2018.

On June 28, 2018, we reported completion of our first gold pour at the Boungou Mine, slightly ahead of the original schedule. The first pour yielded approximately 325 ounces of gold. We also announced that (i) dry and wet commissioning of the Boungou processing plant were completed, as was our construction, (ii) the vertimill and SAG mill were working according to design achieving the designed hourly throughput and grind size.

On September 4, 2018, we announced that commercial production was achieved at our Boungou Mine, effective September 1, 2018. Commercial production was declared when operations reached the internal commercial production measure of 30 consecutive days of mill throughput at 75% of nominal design capacity (4,000 tpd). During the 30-day period, the mill processed more than 90,000 tonnes of ore at an average grade of 2.4 g/t Au with a recovery rate of 83%. During that same period, the mill mainly processed lower grade ore sourced from the east pit. However, as the process was being optimized, higher grade ore was introduced and a recovery rate of more than 93% was reached at the end of the period. During the pre-commercial period from June to end of August, Boungou produced 12,000 ounces of gold. In 2018, the Boungou Mine is expected to produce between 60,000 and 70,000 ounces of gold in commercial production.

2019[3]

On February 11, 2019, together with Savary Gold Corp. (TSX-V: SCA) ("**Savary**"), we announced entering into a non-binding letter of intent (the "**LOI**") contemplating the acquisition by SEMAFO of all of the outstanding common shares of Savary (the "**Savary Shares**") not already owned by SEMAFO.

Concurrently with this announcement, we also announced a maiden inferred mineral resource for the Bantou Zone of 2,100,000 tonnes at 5.35 g/t Au for 361,000 ounces of gold. The Bantou Zone is located approximately 170 kilometers south of the Mana Mine in Burkina Faso. Bantou is one of several targets that we explored in 2018 on the Dynikongolo permit. The 2018 program included a core drill program to test the down plunge extension of the Bantou area and an RC program to explore proximal targets and the Tankoro Zone.

On March 11, 2019, together with Savary, we announced entering into a definitive combination agreement pursuant to which all of the issued and outstanding Savary Shares not already owned by us were to be acquired. All of Savary management and board and significant shareholders, together representing 29.3% of the Savary Shares, were supportive of the combination and entered into support agreements with SEMAFO to vote their Savary Shares in favour of the combination.

On April 30, 2019, we announced the acquisition of Savary by way of a three-cornered amalgamation (the "**Transaction**"). Under the terms of the Transaction, Savary shareholders received 0.0336 SEMAFO common shares for each Savary Share. Immediately before the Transaction, SEMAFO owned 39,533,333 Savary Shares through a wholly owned subsidiary, representing approximately 15.4% of the issued and outstanding Savary Shares on a non-diluted basis. SEMAFO also owns through a wholly-owned subsidiary, warrants exercisable for up to 3,100,000 additional Savary Shares at an exercise price of C$0.05 expiring on December 31, 2021 (the "**Savary Warrants**").

[3] This section may contain forward-looking statements. For further information regarding forward looking statements contained in this AIF, please refer to ITEM 23 – FORWARD-LOOKING STATEMENTS.

Assuming the exercise in full of the Savary Warrants, SEMAFO would have owned 42,633,333 Savary Shares through a wholly-owned subsidiary, representing 16.67% of the then issued and outstanding Savary Shares on a partially-diluted basis. As a result of the Transaction, SEMAFO acquired 49,932,740 common shares in the share capital of the company resulting from the Transaction ("**Amalco**"), representing 100% of the issued and outstanding common shares of Amalco. The exchange ratio under the Transaction implied consideration of C$0.10 per Savary Share, based on the closing price of the SEMAFO's common shares on the Toronto Stock Exchange on February 8, 2019, and represented a premium of 100% based on the closing price of Savary Shares on the TSX Venture Exchange on February 8, 2019. The transaction value (excluding SEMAFO's existing 15.4% equity interest) was approximately C$22.7 million on a fully diluted in-the-money basis, representing 2.2% dilution to SEMAFO shareholders. Further to the Transaction, the Savary Shares were delisted from the TSX Venture Exchange and Amalco ceased to be a reporting issuer in each of the applicable provinces of Canada.

On August 5, 2019 we announced that there was a pit wall failure at Mana in the Wona pit. No mining was underway in the area, and no-one was injured. We also announced that we estimated the impact at Mana to be approximately 40,000 – 50,000 ounces of lower production than originally contemplated. Therefore, annual guidance at Mana was revised to 130,000 – 140,000 from the original 170,000 – 190,000 ounces. There was no change to our Mana all-in sustaining cost guidance. During the shutdown, mining costs of approximately $22 million for Siou and Wona were capitalized in development and there was a non-recurring charge of approximately $7 million mostly representing fixed costs for the period. Boungou guidance remained unchanged at between 220,000 and 240,000 ounces of gold at an all-in sustaining cost of between $470 and $510 per ounce.

On September 30, 2019 we announced positive results from a preliminary economic assessment ("**PEA**") for our Nabanga project in Burkina Faso:

- Pre-tax NPV of $147 million and after-tax NPV of $100 million, using a 5% discount rate
- Life of mine ("**LOM**") gold production of 571,000 ounces at an all-in sustaining cost of $760/oz and a gold recovery of 92% during the 8 years of operations
- Pre-production capital expenditure of $84 million, including 20% contingency, and $56 million in LOM sustaining capital
- Project economics (base case at $1,300/oz gold price):
    - After-tax 5% NPV: $100 million
    - After-tax IRR: 22.6%
    - Payback period: 4.4 years
- Preferred mining method – open-pit/ underground mining on the upper and at-depth portions of the ore zone, respectively
- Opportunities to improve returns through an increase in resources and additional cost saving measures in the mining operations and development

On November 6, 2019 we announced that there was an attack on a convoy travelling on the road between Fada and the Boungou Mine site in the Est region of Burkina Faso. The incident happened approximately 40 kilometers from the Boungou Mine. The convoy, escorted by military personnel, comprised five buses transporting our national employees, contractors and suppliers.

On November 11, 2019 we reported that over the weekend we had begun transportation of people by helicopter from the Boungou Mine site. We also announced that a total of 241 of our employees, contractors and suppliers had been involved in the attack, resulting in several fatalities and injuries.

On November 20, 2019 we subscribed for and acquired 5,714,286 common shares of Compass Gold Corporation ("**Compass**"), for an aggregate purchase price of $2,000,000.10, pursuant to a Compass private placement that closed on November 21, 2019 (the "**Offering**"). SEMAFO held no common shares of Compass prior to the completion of the Offering. The common shares acquired by SEMAFO represented approximately 10.5% of the issued and outstanding common shares of Compass following completion of the Offering. SEMAFO held no additional options, warrants or other securities convertible into or exchangeable for common shares of Compass.

On December 2, 2019 we announced that the Boungou Mine remained closed and that we were evaluating a variety of options to restart operations at Boungou in a safe and secure manner. Additional security personnel were added on-site, ensuring the continued safety of the site and of the small number of personnel remaining.

As of November 6, 2019, the stockpile held approximately 1.1 million tonnes of ore at an estimated average grade of 3.4 grams per tonne.

On December 23, 2019 we announced that we entered into an amendment agreement (the "**Amendment Agreement**") with Macquarie Bank Limited that updated the original credit agreement (the "**Original Agreement**") with two main updates, the first one relating to an event of default provision. The Original Agreement provided that an event of default occurred when, among other things, operations at Boungou remained suspended for a period of 30 days or more. We obtained a waiver from Macquarie Bank Limited in early December as we worked towards the Amendment Agreement. Under the Amendment Agreement, a new event of default occurred if the mill had not restarted and the processing of ore from the existing stockpiles at Boungou had not commenced by February 15, 2020 or such later date that Macquarie Bank Limited may agree with.

The second update related to the reserve account, recorded as restricted cash, in which $15 million is held until the loan reaches $30 million. Under the Amendment Agreement, this restricted cash of $15 million applied against the principal payment on December 31, 2019. The reserve account and restricted cash was therefore nil at December 31, 2019, but we are required to replenish the reserve account back to $15 million by March 31, 2020, in addition to making the regular principal payment of $15 million due March 31, 2020.

On February 6, 2020, we announced that the Boungou plant had restarted, processing of the stockpile had begun and that we were taking a measured approach to Boungou in 2020 involving a phased plan. The initial three-month phase contemplates processing the stockpile and utilizing the on-site supplies inventory with limited deliveries of new supplies. During this period, we expect production to reach between 42,000 and 46,000 ounces at an all-in sustaining cost of between $530 and $560 per ounce.

As part of our phased plan, employees and contractors who were previously travelling on the public road are being transported by air between Fada and Boungou and lodged at the mine site. Currently, we are utilizing a 10-person helicopter. When construction of the airstrip will have been completed, we anticipate transitioning to an airplane.

Our phased plan foresees a restart of mining in the fourth quarter while continuing to process stockpiles. The current stockpile holds 1.1 million tonnes at an average grade of 3.4 g/t Au, representing approximately ten months of mill feed, subject, however, to the government improving security on the public road and in the surrounding region in order to increase the frequency of deliveries required to operate after the initial three months. We also were in discussions with the authorities regarding the necessary security plan as well as with mining contractors to replace African Mining Services at Boungou by the fourth quarter, following its decision to terminate the contract at Boungou.

ITEM 4 – MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES

We have properties which are at different levels of advancement. The following estimates of mineral reserves and resources were estimated as at December 31, 2019, the whole in accordance with the provisions adopted by the Canadian Institute of Mining Metallurgy and Petroleum and incorporated into *National Instrument 43-101 – Standards of Disclosure for Mineral Projects* ("**NI 43-101**"). All reserve and resource estimates for the Tapoa, Mana, Yactibo and Bantou gold deposits were prepared and approved by François Thibert, M.Sc.Geo, Manager, Estimate Group Resources and Reserves West Africa, our "Qualified Person". See ITEM 5 – MINERAL PROJECTS – Tapoa Property, Mana Property, Bantou Property and Yactibo Property.

Consolidated Reserves and Resources

PROPERTY	Mana[1,2,5,6]	Tapoa[1,2,5,6] (Boungou Project)	Yactibo[1,3,5,6] (Nabanga Project)	Bantou Project[1,4,5,6]	Total
MINERAL RESERVES					
Proven					
Tonnes	3,260,000	3,230,000			**6,490,000**
Grade (g/t Au)	3.56	4.47			**4.01**
Ounces	373,500	464,000			**837,500**
Probable					
Tonnes	11,783,000	7,068,000			**18,851,000**
Grade (g/t Au)	2.73	3.38			**2.97**
Ounces	1,033,600	769,000			**1,802,600**
TOTAL MINERAL RESERVES					
Tonnes	15,043,000	10,298,000			**25,341,000**
Grade (g/t Au)	2.91	3.72			**3.24**
Ounces	1,407,100	1,233,000			**2,640,100**
MINERAL RESOURCES (exclusive of reserves)					
Measured					
Tonnes	8,828,000	502,000			**9,330,000**
Grade (g/t Au)	1.48	4.11			**1.62**
Ounces	418,900	66,000			**484,900**
Indicated					
Tonnes	34,808,000	5,281,000			**40,089,000**
Grade (g/t Au)	2.04	3.16			**2.19**
Ounces	2,280,600	537,000			**2,817,600**
TOTAL M&I					
Tonnes	43,636,000	5,783,000			**49,419,000**
Grade (g/t Au)	1.92	3.25			**2.08**
Ounces	2,699,500	603,000			**3,302,500**
Inferred					
Tonnes	8,945,000	1,318,000	3,402,000	51,108,000	**64,773,000**
Grade (g/t Au)	2.66	2.98	7.69	1.37	**1.91**
Ounces	765,800	126,000	841,000	2,245,000	**3,977,800**

1 The Corporation indirectly owns a 100% interest in all of its permits, except for the permits held by SEMAFO Burkina Faso S.A. ("**SEMAFO BF**") and SEMAFO Boungou S.A. ("**SEMAFO Boungou**)", respectively, in which the Government of Burkina Faso holds a 10% interest.
2 Mineral reserves and resources at Mana and at Tapoa (Boungou project) were estimated using a gold price of $1,200 and $1,400 per ounce, respectively.
3 Mineral resources at Yactibo permit group (Nabanga project) were reported above a 3.0 g/t Au cut-off grade.
4 Mineral resources at Bantou project were estimated using a gold price of $1,500 per ounce.
5 Rounding of numbers of tonnes and ounces may present slight differences in the figures.
6 All mineral resources reported are exclusive of mineral reserves.

Mana, Tapoa, Yactibo, Bantou

	DEPOSITS	DECEMBER 31, 2019								
		PROVEN RESERVES			PROBABLE RESERVES			TOTAL RESERVES		
		Tonnage	Grade (g/t Au)	Ounces[5]	Tonnage	Grade (g/t Au)	Ounces[5]	Tonnage	Grade (g/t Au)	Ounces[5]
MANA[1,2,6]	WONA-KONA	734,000	2.37	55,800	9,554,000	2.31	709,400	10,288,000	2.31	765,200
	NYAFÉ	265,000	5.81	49,600	6,000	3.96	700	271,000	5.77	50,300
	FOFINA	24,000	5.20	4,000	3,000	3.95	300	27,000	4.95	4,300
	SIOU OP	567,000	3.35	61,000	168,000	1.79	9,700	735,000	2.99	70,700
	SIOU UG	1,607,000	3.78	195,200	1,401,000	6.15	276,900	3,008,000	4.88	472,100
	YAMA	-	-	-	651,000	1.75	36,600	651,000	1.75	36,600
	ROMPAD	63,000	3.90	7,900	-	-	-	63,000	3.90	7,900
	TOTAL	**3,260,000**	**3.56**	**373,500**	**11,783,000**	**2.73**	**1,033,600**	**15,043,000**	**2.91**	**1,407,100**
TAPOA[1,2,6]	BOUNGOU OP	2,101,000	5.04	340,000	7,068,000	3.38	769,000	9,169,000	3.76	1,109,000
	ROMPAD	1,129,000	3.40	124,000	-	-	-	1,129,000	3.40	124,000
	TOTAL	**3,230,000**	**4.47**	**464,000**	**7,068,000**	**3.38**	**769,000**	**10,298,000**	**3.72**	**1,233,000**
TOTAL		**6,490,000**	**4.01**	**837,500**	**18,851,000**	**2.97**	**1,802,600**	**25,341,000**	**3.24**	**2,640,100**

	DEPOSITS	DECEMBER 31, 2019								
		MEASURED			INDICATED			TOTAL RESOURCES		
		Tonnage	Grade (g/t Au)	Ounces[5]	Tonnage	Grade (g/t Au)	Ounces[5]	Tonnage	Grade (g/t Au)	Ounces[5]
MANA[1,2,6]	WONA-KONA	1,290,000	2.09	86,700	21,618,000	2.55	1,775,500	22,908,000	2.53	1,862,200
	NYAFÉ	286,000	3.94	36,300	223,000	5.97	42,700	509,000	4.83	79,000
	FOFINA	292,000	4.25	40,000	253,000	4.45	36,100	545,000	4.34	76,100
	YAHO	5,738,000	0.91	168,500	11,636,000	0.88	330,800	17,374,000	0.89	499,300
	FILON 67	26,000	2.72	2,300	9,000	3.59	1,000	35,000	2.93	3,300
	FOBIRI	469,000	1.80	27,100	114,000	1.52	5,600	583,000	1.74	32,700
	SIOU OP	88,000	0.63	1,800	75,000	0.64	1,500	163,000	0.63	3,300
	SIOU UG	639,000	2.74	56,200	781,000	3.29	82,500	1,420,000	3.04	138,700
	YAMA	-	-	-	99,000	1.56	4,900	99,000	1.54	4,900
	TOTAL	**8,828,000**	**1.48**	**418,900**	**34,808,000**	**2.04**	**2,280,600**	**43,636,000**	**1.92**	**2,699,500**
TAPOA[1,2,6]	BOUNGOU	502,000	4.11	66,000	5,281,000	3.16	537,000	5,783,000	3.25	603,000
TOTAL M&I		**9,330,000**	**1.62**	**484,900**	**40,089,000**	**2.19**	**2,817,600**	**49,419,000**	**2.08**	**3,302,500**

	DEPOSITS	DECEMBER 31, 2019		
		INFERRED		
		Tonnage	Grade (g/t Au)	Ounces[5]
MANA[1,2,6]	WONA-KONA	3,377,000	3.00	325,300
	NYAFÉ	151,000	5.87	28,400
	FOFINA	67,000	4.20	9,100
	YAHO	223,000	0.78	5,600
	FILON 67	6,000	6.32	1,100
	FOBIRI	578,000	1.39	25,800
	MAOULA	2,628,000	1.62	137,100
	SIOU	1,857,000	3.87	230,900
	YAMA	58,000	1.33	2,500
	TOTAL	**8,945,000**	**2.66**	**765,800**
TAPOA[1,2,6]	BOUNGOU	1,318,000	2.98	126,000
YACTIBO[1,3,6]	NABANGA	3,402,000	7.69	841,000
BANTOU[1,4,6]	BANTOU	51,108,000	1.37	2,245,000
TOTAL		**64,773,000**	**1.91**	**3,977,800**

1 The Corporation indirectly owns a 100% interest in all of its permits, except for the permits held by SEMAFO BF and SEMAFO Boungou, respectively, in which the Government of Burkina Faso holds a 10% interest.
2 Mineral reserves and resources at Mana and at Tapoa (Boungou project) were estimated using a gold price of $1,200 and $1,400 per ounce, respectively.
3 Mineral resources at Yactibo permit group (Nabanga project) were reported above a 3.0 g/t Au cut-off grade.
4 Mineral resources at Bantou project were estimated using a gold price of $1,500 per ounce.
5 Rounding of numbers of tonnes and ounces may present slight differences in the figures.
6 All mineral resources reported are exclusive of mineral reserves.

We are presenting 100% of the reserves and resources of the deposits in the above tables and hence excluding minority interests. Regarding open pit reserves, cut-off grades are established with the ultimate pit software in consideration of the rock type and haulage distance.

As of December 31, 2019, SEMAFO's total proven and probable mineral reserves were 2,640,100 ounces of gold. Measured and indicated resources totaled 3,302,500 ounces of contained gold. From December 31, 2018 to December 31, 2019, Mana reserves have varied from 1,522,000 ounces to 1,407,100 ounces with respective tonnage of 15,987,000 and 15,043,000 and respective grade of 2.96 and 2.91 g/t Au, including mining depletion.

As a result of an extensive in-fill drilling program and up-to-date modelling on the Boungou gold deposit, the open-pit proven and probable mineral reserves estimate was established at 10,298,000 tonnes averaging 3.72 g/t Au for 1,233,000 ounces of contained gold. Total measured and indicated ("**M&I**") resources increased by 79% to 5,783,000 million tonnes at 3.25 g/t Au for 603,000 ounces due to a review of Boungou resource estimation parameters. The updated 2019 M&I resource is in-pit constrained, and incorporates remaining below-pit ounces at a cut-off grade of 2.0 g/t Au. In 2018, the resource was underground-constrained only.

The following table summarizes our existing mining and exploration permits in Burkina Faso and Côte d'Ivoire.

Summary of properties per permit group owned or under option (as at March 3, 2020)					
Property name	**Permit type**	**Area (km^2)**	**% of Ownership**	**Expiration dates**	**Comments**
MANA					
Wona-Nyafé	Mining	76.88	90%	March 20, 2027	
Bana	Exploration	136.77	100%	April 10, 2021	
Kokoi	Exploration	121.81	100%	April 10, 2021	
Fobiri 2	Exploration	212.34	100%	January 4, 2021	
Bombouela 2	Exploration	185.6	100%	May 6, 2022	
Momina	Exploration	222.79	100%	April 10, 2021	
Pompoï Nord	Exploration	60.82	100%	February 17, 2020	Awaiting renewal decree
Koussaro (formerly Pompoi)	Exploration	235.93	100%	-	Awaiting decree for new permit
TAPOA					
Boungou	Mining	29.06	90%	January 23, 2024	Area included in Tawori permit
Tawori	Exploration	248.32	100%	October 13, 2022	
Pambourou	Exploration	175.3	100%	September 28, 2020	
Bossoari	Exploration	29.00	100%	November 20, 2020	
Dangou	Exploration	186.98	100%	December 15, 2021	
YACTIBO					
Nabanga	Exploration	178.50	100%	April 1, 2020	
Kamsongo	Exploration	184.24	100%	September 24, 2020	
Napade	Exploration	54.5	100%	September 12, 2020	
Kondagou	Exploration	246.44	100%	-	Awaiting decree for new permit
BANTOU					
Dynikongolo	Exploration	250.00	100%	December 16, 2020	
Milpo	Exploration	222.39	100%	May 19, 2021	
Niawe	Exploration	185	80.09%	June 25, 2021	
Bio	Exploration	188.7	80.09%	June 25, 2021	
Fakoto	Exploration	62.12	80.09%	July 2, 2021	
Kelesso	Exploration	60.58	80.09%	July 2, 2021	
Bohara	Exploration	48.27	80.09%	-	Awaiting decree for new permit
Serakoro 1	Exploration	187.49	80.09%	November 28, 2019	Awaiting renewal decree
KORHOGO CI					
Korhogo-Ouest	Exploration	232.20	100%	March 25, 2020	
Korhogo-Sud	Exploration	150.44	100%	October 23, 2022	
Korhogo-Nord	Exploration	111.27	100%	July 24, 2023	

ITEM 5 - MINERAL PROJECTS

Reference is made to our definition section found on page 57.

MATERIAL PROPERTIES

Tapoa Property

INTRODUCTION

Information in this section is based on the technical report entitled "Natougou Gold Deposit Project, Burkina Faso", dated March 23, 2016 (the "**Tapoa Report**"), prepared under the supervision of Neil Lincoln, Vice-President, Business Development and Studies at Lycopodium Minerals Canada Ltd. ("**Lycopodium**"), with the participation of Marius Phillips, MAusIMM (CP), Principal Process Engineer at Lycopodium, Glen Williamson, Principal Mining Engineer at AMC Consultants (Canada) Ltd, John Graindorge, Principal Consultant – Applied Geosciences at Snowden Mining Industry Consultants Pty. Ltd. ("**Snowden**"), Jean-Sébastien Houle, Eng. from WSP Canada Inc. and Timothy Rowles, MAusIMM (CP) from Knight Piésold Consulting, all "Qualified Persons" for the purpose of the Tapoa Report. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. Readers should consult the Tapoa Report which is available under SEMAFO's profile on SEDAR at www.sedar.com to obtain further particulars regarding the Boungou gold deposit. The Tapoa Report is not, and shall not, be deemed to be incorporated by reference in this AIF.

Unless otherwise indicated, technical information which has been disclosed since the release of the Tapoa Report has been prepared under the supervision of, or reviewed by, Mr. François Thibert, M.Sc.Geo, Manager, Estimate Group Resources and Reserves West Africa, our "Qualified Person".

PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Tapoa permit group is located in Burkina Faso, West Africa. The project lies approximately 320 km east of Ouagadougou, the capital of Burkina Faso. We indirectly hold, through Birimian Resources Sarl, four contiguous exploration permits – Dangou, Pambourou, Tawori (initially Boungou) and Bossoari, collectively known as the Tapoa permit group, covering approximately 611 km^2 within the Diapaga greenstone belt in the southeast of Burkina Faso. The original vendor of each such permit retains a 0.5% to 1% net profit royalty, payable upon any future gold sales. On December 22, 2016, the Council of Minister of the Government of Burkina Faso approved and granted our mining permit covering an area of 29.06 km^2. The permit is valid for a period of seven (7) years renewable for consecutive five-year periods until depletion of the deposits. The mining permit is held by SEMAFO Boungou, a corporation held 90% by SEMAFO and 10% by the Republic of Burkina Faso. Access to the property is by means of Route Nationale RN04, an all-weather bitumen road from Ouagadougou, the capital of Burkina Faso, through Fada n'Gourma to the Ougarou junction. From there, travel is via a laterite road to the property 60 km to the southeast. Fada n'Gourma is the nearest town with basic hospital, hotel and limited supply facilities. Any significant supplies must be sourced from Ouagadougou. The property area is relatively flat and sits at an elevation of approximately 260 m above sea level. To the east and north of the property are mesas which rise approximately 10 m above the surrounding topography. A small hill is located in the very southern corner of the deposit. The land rises gently to the north, culminating in the height of land separating two watersheds. The main laterite access road into site is located along this ridge top. The road is reasonably well-drained and is accessible year-round to four-wheel drive vehicles. Numerous tracks allow for access to most places throughout the property area.

HISTORY

No exploration is known to have occurred on the Tapoa permit group prior to 2010 when Orbis Gold Limited ("**Orbis Gold**") commenced soil and rock chip sampling. The soil and rock chip sampling were followed up in 2012 with a regional RC drilling program that resulted in the discovery of the Boungou gold deposit. Resource drilling commenced at Boungou in 2012 and culminated with an initial mineral resource estimate being completed by Snowden in August 2013, which was classified and reported in accordance with the 2004 edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (the "**JORC Code"**). Orbis Gold completed further infill drilling at Boungou in 2014 and the mineral resource estimate was updated by Snowden in August 2014 and was classified and reported in accordance with the 2012 edition of the JORC Code. A conversion of the resource from JORC Code to NI 43-101 was completed by Snowden in March 2015 for SEMAFO and reported in accordance with NI 43-101 regulations. Between March 2015 and August 2015, SEMAFO completed an infill drilling program at Boungou aimed at upgrading the confidence in the resource estimate along with exploring targets proximal to the resource area.

No modern production of gold has occurred within the Tapoa permit group. The central part of the Boungou exploration permit has artisanal activity along the north- to south-trending drainage system. Extraction of gold by the local community from artisanal workings has occurred for an unknown period of time, with free gold recovered by gravity methods in gold pans or through simple sluicing methods. The vertical extent of the workings is unknown, however it is believed to reach a maximum depth of approximately 20 m to 40 m, although the vast majority of the workings are less than 5 m deep. Snowden noted that the deeper workings are extremely localised and limited in extent. The total tonnage and grade of material extracted from artisanal workings at the Boungou gold deposit is unknown, however it is not considered to be material to the current mineral resource estimate.

GEOLOGICAL SETTING, MINERALIZATION AND DEPOSIT TYPES

The Tawori exploration permit (initially the Boungou exploration permit), which contains the Boungou gold deposit, lies within the Diapaga greenstone belt, a northeast-southwest orientated belt that extends over 250 km in length and over 50 km in width. We hold four contiguous permits, collectively known as the Tapoa permit group, covering approximately 70 km in strike length along the Diapaga belt.

The stratigraphy at Boungou is relatively simple and quite consistent from hole to hole. The stratigraphy consists of two volcanic flows separated by a volcaniclastic unit. The footwall flow generally progresses upwards from a massive basalt flow to pillowed flows followed by flow breccia and volcaniclastics. The hangingwall is characterized by a medium grained volcanic flow (or sill). All these units are intruded by diorite and/or granodiorite sills, possibly originating from the felsic intrusion located immediately west of the deposit. Late dolerite dykes are also present and appear to be sub-vertical and strike northwest. The Boungou Shear Zone, which hosts the main gold mineralization at Boungou, is located at the contact between the footwall and hangingwall volcanic units, where the volcanic flow top breccias have formed and the volcaniclastics deposited. The contact zone is thought to have served as an area of weakness, focusing the deformation. While the volcaniclastic units are not always present (although the intensity of the alteration can make it difficult to identify), the flow top breccias are interpreted to be ubiquitous across the deposit area.

The Boungou gold deposit can be described as a West African shear zone hosted greenstone gold deposit. The main mineralized lode is interpreted as a flat-lying anticlinal shear that outcrops in the southeast and plunges gently to the northwest. The mineralization has a strike length of approximately 2 km, striking towards a bearing of 315° and an across-strike length of approximately 1 km (towards 045°). The mineralization is gently folded with the fold axis oriented along strike and the limbs dipping gently at approximately 15°.

Gold mineralization is associated with biotite and silica-sericite alteration, along with disseminated sulphides, such as pyrrhotite, pyrite and minor arsenopyrite and chalcopyrite, with occasional free gold. The mineralization is structurally controlled and is hosted primarily within a large shear zone and its associated alteration. Arsenopyrite is almost invariably associated with the presence of gold in assayed samples. The percent arsenopyrite logged can be used as an initial identification of the mineralized lode. Although not common, visible gold has been observed in core in some drill holes.

EXPLORATION

Stream sample geochemistry, airborne geophysics (helicopter-borne magnetic) and surface mapping are used to identify areas for detailed investigation. Ground geophysics is also used to test extensions of known large scale structures (ex: IP). Sampling via auger or rotary air blast drilling follows on fixed grids in order to reach the saprolite below the lateritic cover.

Trenching and/or RC drilling is then used as a first pass to test the auger drilling anomalies. Generally, exploration sample quality is considered as being sufficient to indicate significant gold mineralization but not representative of the overall grade associated with the deposit. Following positive results, RC drilling and core drilling are used to extend the information at depth and to delineate the mineralized bodies.

DRILLING

Drilling during 2019 totaled 25,093 meters in 225 holes, mostly dedicated to the Boungou Nord sector, exploring near-surface splays of the Boungou Shear Zone. In addition, a total of 1,898 auger holes were completed in the Boungou Nord area to better define existing soil sampling anomalies.

Significant results were obtained in the area, particularly in the fourth quarter, that demonstrate the potential for outlining significant resources to enhance the future mine plan. Compilation of results is underway with the objective of isolating potential areas for near-surface resource estimation.

Hole No.	From (m)	To (m)	Length (m)	Au (g/t)
TPA1837	32	45	**13**	**1.57**
TPA1841	36	45	**9**	**1.93**
TPA1848	47	57	**10**	**1.06**
TPA1849	28	32	**4**	**7.48**
TPA1860	89	94	**5**	**3.75**
TPA1865	76	95	**19**	**1.72**
TPA1866	94	99	**5**	**4.54**
TPA1866	116	121	**5**	**6.32**
TPA1869	43	47	**4**	**18.06**
TPA1883	55	62	**7**	**2.11**
TPA1936	108	118	**10**	**1.22**
TPA1937	19	24	**5**	**6.79**

At the end of 2019, the total dataset comprised 2,823 drill holes representing 298,360 meters. Of this total 4,276 drill holes (228,511 meters) including 2,461 grade control test holes were used for the Boungou resource estimate.

SAMPLING, ANALYSIS AND DATA VERIFICATION

Samples used for resource estimates at Boungou are from exploration and grade control drill chips from RC drilling or core from diamond drill drilling.

Reverse circulation samples are collected from every 1-meter drill run in pre-labelled plastic bags directly from the cyclone on the drill rig. Approximately 30 kg to 40 kg of material is reduced using a tiered riffle splitter to obtain a subsample of about 2 kg which is packed in a poly bag. Sample tickets are placed into each poly bag, and the hole ID and sample depth recorded on the remaining ticket stub. The riffle splitter is cleaned after each sample with a brush. A second split of the same size is kept on-site for reference, and the rest of the RC-sampled material discarded. A small sample of chips from each 1 m interval is removed with a sieve, washed and placed in labelled chip trays for logging and future reference. RC samples are collected dry 99% of the time. Sample bags are then transported to the on-site preparation laboratory for crushing and pulverizing. Quality control samples, including reference materials and blanks, are also submitted with these samples.

Diamond core samples are collected on a maximum of 1.2 m intervals or to the lithological/alteration/mineralization boundaries, with a minimum sample length of 0.2 m. The core is cut in half lengthwise using a diamond saw and the sampled half core placed in a plastic bag and labelled with the hole ID and depth. A sample ticket labelled with the hole ID and depth is also placed in the bag. Quality control samples are also submitted with these samples. The other half is kept for reference in core storage shelters at the Boungou exploration camp.

Sample pulps are transported to ALS Laboratory ("**ALS-OU**") in Ouagadougou for assaying. Quality control samples, including reference materials and blanks, are also submitted with these samples.

In 2019, SEMAFO used the following laboratories:

- ALS-OU – independent laboratory located in Ouagadougou, Burkina Faso. The laboratory does not have recognized accreditation, but is part of the ALS Group of laboratories that operates under a global quality management system under ISO 9001:2008, and participates in international proficiency testing programs.
- WESTAGO – Boungou on-site laboratory owned by SEMAFO and operated by WESTAGO. The laboratory is not accredited, but regularly participates in international proficiency testing programs.
- Mana mine's site laboratory facilities ("**SMF-Lab**") owned and operated by SEMAFO. The laboratory is not accredited, but regularly participates in international proficiency testing programs. The laboratory acted as referee lab for the annual check assay as part of the quality control process.

An on-site preparation lab, run and managed by ALS-OU, is set up at the Boungou exploration camp. RC and core samples are first registered, ordered and then weighed. Samples are oven-dried at a nominal 100°C for up to 12 hours depending on the material. The whole sample is crushed to 70% passing 2 mm. One in 50 samples is screened to ensure 70% passing 2 mm. The crushed sample is split for pulverization using a rotary or riffle splitter. The remaining material is stored as a coarse reject. A 250g split of the 2mm material is then pulverized to 85% passing 75 µm in a bowl and puck pulveriser. One in 20 samples is screened to ensure 85%, passing 75 µm. The 250 g sub-sample is collected (by scooping) and conditioned for shipping to the Ouagadougou laboratory. Sample pulps are stored on-site in a secure locked room until shipment to Ouagadougou. Transportation occurs on a regular basis with security guards. Personnel releasing the samples for shipment to the laboratory assume responsibility for the sample security and paperwork with recorded sample numbers accounted for prior to shipment to the laboratory. The remaining material (pulp reject) is returned to the original bag (or a plastic bag if the original is not suitable) and stored on-site. All preparation equipment is flushed with barren material prior to the commencement of the job. Cleaning of equipment (e.g. crushers and pulverisers) is by compressed air and carried out between each sample.

Gold content was determined at the ALS-OU using a standard 50g fire assay procedure with atomic absorption by spectrometry ("**AAS**") finish with a detection lower detection limit of 0.01ppm gold and upper detection limit of 100ppm gold. A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6mg of gold-free silver and then cupelled to yield a precious metal bead. The bead is digested in 0.5ml dilute nitric acid in the microwave oven. 0.5ml concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 10ml with de-mineralized water, and analysed by atomic absorption spectroscopy against matrix-matched standards. ALS-OU internal quality assurance and quality control ("**QA/QC**") process involves standards, blanks and duplicates. Each analysis batch consists of 84 samples, of which 78 are client samples and 6 are quality control ("**QC**") samples, comprising two reference material, one duplicate (taken before crushing), two pulp duplicates, one blank (pulp). Additional pulp check assays are performed on all batches (depending on the number of anomalies present within a given batch). Assay reports from the primary laboratory are submitted as digital data files and as PDF certificates.

The WESTAGO laboratory is used for mine grade-control samples. Preparation and analytical procedures are similar to the Mana on-site analytical facilities. The samples are first registered, ordered and weighed before being dried for between 8 and 10 h depending on moisture. Every ±2 kg sample is crushed to 70% passing 2 mm (-10 mesh) and quartered to get a first 250-g split of crushed material. The 250-g riffle split is pulverized to 85% passing 75 µm (200 mesh) and quartered to get a 50-g split. All preparation equipment is flushed with barren material prior to the commencement of each run. Cleaning of equipment (e.g., crushers and pulverisers) is by compressed air between each sample. All samples are analysed using a 50g fire assay procedure with an AA finish with a detection lower detection limit of 0.01 ppm gold. Samples grading over 15 ppm gold are re-assayed using a 50g fire assay procedure with gravimetric finish. The WESTAGO internal QA/QC process involves standards, blanks and duplicates. Each

analysis batch consists of 25 samples, of which 20 are client samples and 5 are QC samples, comprising one reference material, one duplicate (taken before crushing), two pulp duplicates, one blank (pulp). Assay reports from the mine laboratory are submitted as digital data files. All drill samples are collected under direct supervision of the project staff from the drill rig to the mine site laboratory.

The QA/QC measures include the insertion of blank samples ("**blanks**"), certified reference materials ("**CRM**"), field duplicates and lab replicates. Additionally, re-assaying of a set number of sample pulps at a secondary umpire laboratory is performed on a quarterly basis as an additional test of the reliability of assaying results. The CRMs are supplied by ROCKLABS Limited for a variety of gold grade ranges suitable for this type of deposit. QC results are monitored by SEMAFO geologists as part of the assay data validation process during data loading. Sample submissions falling outside of acceptable rejection limits are investigated and resubmitted for re-assay, if deemed necessary.

QA/QC results are reviewed by the company's QP on a quarterly basis, and an annual summary report is published that includes the referee lab results. SEMAFO considers that the sampling and analytical methods and security procedures are adequate for the purposes of the resource estimation.

Exploration drilling data are entered directly into a laptop using Geobank Mobile software and thereafter synchronized and transferred into a central database using the Geobank data management system from Micromine. A set of predefined validation rules are run on the data as part of the importation process. Final data validation, including geological and survey data, is carried out by project geologists and/or database geologists. A separate set of validation steps is followed for assay data after it is imported into Geobank.

Grade control drilling data are handled through Datamine Fusion data repository and management suite. Data are transferred and stored through secure connection to local-based and central corporate servers.

Sampling and logging procedures were reviewed by SEMAFO QP and found them to be appropriate and conducted to industry standards. The genetic model adopted is appropriate and represents the mineralization at Boungou. The database used for the resource estimate was generated in a credible manner and properly assembled and is therefore suitable for use in estimating the mineral resource.

MINERAL PROCESSING AND METALLURGICAL TESTING

A detailed metallurgical testwork program was undertaken that focused on primary ore from the Boungou gold deposit. Quantities of oxide ore presented to the process plant are expected to be around 1% of reserves and as such, this ore type was not included in the master composite work. However, it was tested in the variability work.

The detailed testwork was carried out from March 2013 to August 2015 under the direction of Lycopodium, with input from former property owner, Orbis Gold and later SEMAFO, using HQ and PQ (123 mm) drill core recovered from both resource and metallurgical drilling campaigns.

In general, the Boungou primary ore is an abrasive, competent ore with above average comminution energy requirements. The ore has a high-gravity recoverable gold content; leach kinetics are very slow when gravity is not included in the flowsheet. High dissolved oxygen levels and lead nitrate are required to achieve fast leach kinetics and adequate gold recovery. Anticipated lime consumption for primary ore is low to moderate, provided good quality water can be provided on site. Cyanide consumption is likely to be moderate. High lime consumption will be experienced if oxide ore forms part of the feed blend.

The variability testwork showed that overall gold recoveries for the Boungou primary ore ranged from 84 % to 99%. There was a distinct relationship between recovery in the gravity stage and overall recovery. LOM head grades for the process plant are expected to average 4.15 g/t Au with a gold recovery of 92.9%.

The results suggest that the residue grade is moderately correlated with the amount of coarse gold in the sample (measured by % gold in +75 micron fraction of the screen fire assay), arsenic head assay, and gold head assay. A constant tail relationship is not appropriate.

With consideration of the parameters currently in the geological model, a relationship between the residue grade and the gold head assay was developed to produce the following predictive equation:

Gold Residue (g/t Au) = 0.1378 + 0.0384*Gold Head Assay (g/t Au)

For example, for a gold head assay of 4.36 g/t Au, the gold residue grade would be 0.31 g/t Au.

As silver residue grades are frequently at the assay detection limit and no trend with head grade is apparent, it is recommended that a simple arithmetic average of all the silver recovery figures be used i.e. 67%.

Following construction and commissioning of the site, commercial production was achieved on September 1, 2018. For the remainder of the year, a total of 76,138 ounces was produced or 63,605 ounces excluding the commissioning period. So far, gold recovery appears to be slightly above the predicted model.

In 2019, 999,700 tonnes of ore were processed at an average grade of 6.65 g/t Au with an average recovery of 96%. The DFS is based on orebody average head grades of 4.3 g/t vs 6.65 g/t in year 2019. Overall recovery is positively affected by higher gravity recovery which impact total recovery by +2%. Gold production for the year totalled 205,200 ounces at an all-in sustaining cost of $497/oz. Mine production was stopped on November 6, 2019 due to the attack on buses transporting our employees, contractors and suppliers from the Boungou Mine to the capital of Ouagadougou. The Boungou Mine was put on Care & Maintenance for the rest of the year. On February 6, 2020, we announced that the Boungou plant had restarted, processing of the stockpile had begun and that we were taking a measured approach to Boungou in 2020 involving a phased plan.

MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES

A resource block model has been created for the entire deposit. A three dimensional (3D) mineralized solid has been updated from all drill hole data (including grade control drilling), limiting resources to the material inside the solid. The mineralized envelope has been interpreted using Micromine software and the wireframe were created with Leapfrog software. All blocks interpolated below the surface topography or the mine surface survey as of December 31, 2019 make up the mineral inventory at that date. Blocks are classified relative to proximity to composites and corresponding precision/confidence level. Technical and economic factors are then applied to the blocks in the form of pit-optimization, optimized stope designs and cut-off grades to constrain the resources to those that present a reasonable prospect of economic extraction. Variographic analysis was undertaken. Resources were modelled using Studio RM software package from Datamine.

SEMAFO's QP that prepared the Boungou mineral reserve and mineral resource estimates is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the mineral resource estimate.

MINING OPERATIONS

Mining will use a conventional open-pit mining method, with hydraulic excavators in backhoe configuration to mine the mineralized zone, and in face-shovel configuration to mine the majority of the waste. The majority of the rock requires blasting and only the softer material located within the top 5 m to 10 m of the deposit will be free digging and loaded directly by hydraulic excavators. The mining operations have been initially contracted out with SEMAFO overseeing management and the provision of the mining technical services. Following the November 6 events, our contractor African Mining Services decided to terminate the contract at Boungou. We are in the process of replacing this contractor by the fourth quarter 2020.

PROCESSING AND RECOVERY OPERATIONS

The metallurgical treatment route selected has been based on the results of the testwork program and includes processing ore at 4,000 tpd via the following unit process operations:

- Single-stage primary crushing with a jaw crusher to produce a crushed product size of 80% passing (P_{80}) of 133 mm.
- Mill feed surge/overflow bin that overflows to an 8,000-tonne stockpile to provide 48 hours of capacity. During extended periods of up to two days for primary crusher equipment maintenance, ore from the stockpile will be reclaimed by a loader to feed the grinding circuit.
- The grinding circuit is a SATMC type, which consists of a closed circuit semi-autogenous grinding mill ("**SAG**"), a pebble crusher for SAG mill discharge oversize and a closed-circuit tower mill to produce a P_{80} grind size of 63 µm.
- A gravity gold recovery circuit.
- Hydrocyclones are operated to achieve a cyclone overflow slurry density of 27% solids to promote better particle size separation efficiency. Subsequently, a pre-leach thickener is included to increase slurry density to the leach circuit, minimize leach tank volume requirements and reduce overall reagent consumption.
- Leach circuit with five tanks to achieve the required 36 hours of residence time at nominal plant throughput. Carbon-in-pulp carousel circuit consisting of seven stages is a carbon adsorption circuit for recovery of gold dissolved in the leaching circuit.
- AARL elution circuit with gold recovery to doré. The circuit includes an acid wash column to remove inorganic foulants from the carbon with hydrochloric acid.
- Carbon regeneration kiln to remove organic foulants from the carbon with heat.
- Tailings thickener to increase slurry density for water recovery prior to tailings discharge to the tailings storage facility.

The processing facility also includes water, air and oxygen services (storage and distribution), and reagent and grinding media storage and usage.

INFRASTRUCTURE, PERMITTING AND COMPLIANCE ACTIVITIES

Infrastructure

The major infrastructure at the site to support a 4,000 tpd (1.34 Mtpa) mining and processing facility includes 15.4 Megawatt on-site power generation via hybrid heavy fuel oil and light fuel oil generators, electrical distribution, bulk fuel storage, tailings storage facility ("**TSF**"), water storage dams for water harvesting, sediment ponds, raw water storage facility, main access road, reagents and consumables storage, plant operations and maintenance buildings, administration building, medical facilities, warehousing main kitchen and dining room, engineering and exploration offices, accommodation camps with services for operations and maintenance personnel, and security.

The TSF has capacity to store 10 million tonnes ("**Mt**") of tailings generated by the process plant required for the LOM with tailings being produced at a rate of 1.34 Mtpa. The preferred site selected for the project is located 800m to the north-east of the process plant. The TSF requires a single embankment along its south and western extents with a total embankment length of 1665 m and with a maximum embankment height of 23.6 m at the southwest corner. The eastern and northern margins of the storage facility are confined by a natural laterite ridge line, and therefore no supporting embankment is required along these margins. The tailings beach surface at full capacity covers an area of approximately 76.5 hectares. Tailings are pumped to the TSF as a slurry at 62% to 65% solids and are deposited sub-aerially to facilitate drying and consolidation of the tailings mass. The second TSF lift was completed in 2019. A total of 6 lifts will be required throughout the LOM which correspond to a lift every 1.5 years approximately. The next TSF lift is planned in the first semester of 2021 assuming normal production scenario.

Geochemical testing of the two composite tailings samples were conducted and found to be non-acid forming but were highly enriched in arsenic which was soluble under the pH conditions anticipated in the TSF. As a result of the high

arsenic in the tailings solids and supernatant a robust seepage control system comprising an above liner underdrainage system, a geomembrane liner overlying a compacted in-situ low permeability sub-base and a sub liner seepage recovery drains were included in the design.

The total water demand for the site was estimated at between 1.1 and 1.4 million m^3 per year. The water demand for the process plant amounts to 0.75 million m^3, which includes the process raw water requirement of 0.08 million m^3 but excludes water in ore. Other water demands include a provision of between 0.2 million m^3 and 0.6 million m^3 for dust suppression and wash-down water and 0.04 million m^3 for potable water requirements. The demand is met from TSF decant, pit dewatering (including precipitation on the pit area), runoff from the rompad and plant site and sediment impacted runoff collected in the sediment control ponds. The balance of the water demands is made up of raw water harvested from the groundwater and surface water sources.

Raw water demand at Boungou is met from two creeks located to the east and west of the process plant and water harvested from the sediment ponds located around the site. An East Water Supply Dam was constructed approximately 1.5 km to the north east of the processing plant. The mean annual runoff at the dam site is estimated to be 0.95 million m^3 from a catchment area of 1,902 Ha. A West Water Supply Sump was constructed approximately 2.0 km to the west south west of the processing plant. The mean annual runoff at the dam site is estimated to be 1.15 million m^3 from a catchment area of 2,262 Ha. The flat topography at the dam sites would result in significant evaporation and seepage losses should this location be used to store water for extended periods of time and therefore a supplementary water storage facility, the Raw Water Pond, has been provided to store water more efficiently. Three major sediment ponds have been designed to capture runoff from the waste dumps with an upstream clean water diversion designed to carry non impacted water around the site. In light of the above described water infrastructure, the water demands at Boungou will be fully met. In 2019, raw water consumption averaged 0.3 m^3/tonne. The actual level of water storage on site provides sufficient amount of water for more than a year of production.

Environmental, Permitting and Social or Community Impact

Burkina Faso has a regulatory framework for environmental and social management. The relevant policies, laws and regulations of Burkina Faso were taken into account during the implementation of the Environmental and Social Impact Assessment ("**ESIA**").

The application for an operating permit requires a feasibility study ("**FS**") that must first be accepted by the *Ministère de l'environnement et du développement durable*[4]. The FS must include an ESIA which, in turn, must include a Resettlement Action Plan ("**RAP**") that has been accepted by all stakeholders. Once in production, a mining permit holder is required[5] to open under his name a fiduciary account named *Fonds de préservation et de réhabilitation de l'environnement minier*[6] at the *Banque Centrale des États de l'Afrique de l'Ouest*[7]. This account must be funded annually on January 1 by an amount equal to the total rehabilitation budget presented in the ESIA, divided by the number of years of production to cover the costs of mine reclamation, closure and rehabilitation.

Both the ESIA and the RAP were filed with the government of Burkina Faso in the second quarter of 2016. Our mining permit application for Boungou was approved on December 22, 2016 by the Council of Ministers of the Government of Burkina Faso.

Many baseline studies have been conducted from 2013 and 2015 in order to fully document the sensitive environmental and social components of Boungou.

The stakeholder information and consultation process comprised an integral part of the ESIA. Mechanisms and communication tools were put in place so that all those involved in, or affected by, the project could freely express themselves. The information collected during these consultations helped identify issues, risks, benefits, and opportunities in order for the project to avoid, minimize, or offset negative impacts and enhance the positive ones.

[4] Ministry of Environment and Sustainable Development
[5] Decree No. 2007-845/PRES/PM/MCE/MEF.
[6] Fund for the Preservation and the Rehabilitation of the Mining Environment
[7] Central Bank of West African States

Our project impacts the physical, biological, social and economic components of the Boungou project area. Such impacts on physical environment are moderate given the mining operations have a zero water discharge and that the project is engineered to protect ground water from potential cyanide contamination. The most significant impact has been the social component with the resettlement of the population that were living on its site. Boungou required the relocation of 165 concessions involving approximately 900 inhabitants and compensation was paid for 813 Ha of farmland. The economic impact of the project at the local, regional, and national levels is positive as providing jobs during construction, operation and closure phases will increase household incomes and improve living conditions. The revenues generated by the mining operation will also increase Burkina Faso's internal revenue through taxes and royalties charged by the local authorities.

We are subject to a community development tax of 1% of our revenues at the Boungou Mine. For the year ended December 31, 2019, the community development tax at the Boungou Mine amounted to $2,958,000. In addition, for the year ended December 31, 2019, corporate social responsibility expenses, representing contributions made to SEMAFO Foundation, totalled $859,000.

Geochemical studies have been conducted to assess the potential for acid drainage (Acid Rock Drainage) and metal leaching of the waste rock and construction materials as well as CIP tailings and heap leach solids. It was found that the direct seepage from the waste dump meets Burkina Faso's Effluent Discharge Criteria for release to surface water.

A Conceptual Closure and Rehabilitation Plan was developed including work to be conducted from the closure of the mine, at the end of operational activities, as well as progressive rehabilitation work. The estimated cost for the direct closing, decommissioning and restoration cost, engineering and post closure monitoring is estimated at $18 million. When including contingencies and salvage value recovery, the cost for mine closure and remediation should be $17 million. As of December 31, 2019, $15.1 million has been provisioned in respect of the rehabilitation plan.

CAPITAL AND OPERATING COSTS

Initial Capital Costs

As of December 31, 2019, development costs representing the total budget of $231 million have been incurred.

PRODUCTION 2019

The following table presents 100% of the gold production statistics for the Boungou Mine for the financial year ended December 31, 2019. The Boungou Mine is owned and operated by SEMAFO Boungou in which we own a 90% equity interest.

Production Update[1]	Year ended December 31	
	2019	**2018** (4 months)
Gold production (ounces)	205,200	63,600
Plant ore processed (tonnes)	999,700	368,100
Weighted Head-grade (g/t Au)	6.65	5.75
Weighted Recovery (%)	96	94
Total Cash Cost ($/ounce)[2]	380	403
All-in sustaining cost ($/ounce)[3]	497	596

1 Commercial production started on September 1, 2018. 2019 production figures include a 7-week suspension at Boungou.

2 Total cash cost is a non IFRS financial performance measure with no standard definition under IFRS and represents the mining operation expenses and government royalties per ounce sold.

3 All-in sustaining cost is a non-IFRS financial performance measure with no standard definition under IFRS and represents the total cash cost, plus sustainable capital expenditures and stripping costs per ounce.

TAXES AND ROYALTIES

Our tax rate is 27.5% at Boungou. All shipments with gold spot prices lower or equal to $1,000 per ounce are subject to a royalty rate of 3%, a 4% rate is applied to all shipments with gold spot prices between $1,000 and $1,300 per ounce, and a 5% royalty rate is applied on all shipments with a gold spot price greater than $1,300 per ounce.

TAPOA 2020 EXPLORATION BUDGET[8]

A budget of $1 million has been allocated to Boungou, which comprises 3,000 meters of RC drilling and has the objective of identifying new near-mine resources. Contingent on an improvement in regional security, starting in the second quarter, the RC program will follow up last year's suspended work.

[8] The statements in this section are forward-looking. For more information on forward-looking statements, see ITEM 23-FORWARD-LOOKING STATEMENTS.

Mana Property

INTRODUCTION

Below is a reproduction of the summary contained in the technical report entitled "Mana Property, Burkina Faso, NI 43-101 Technical Report, Disclosing the Results of the Siou Underground Prefeasibility Study", dated March 26, 2018, with an effective date of December 31, 2017 (the "**Mana Report**") and prepared under the supervision of Richard Gowans, B.Sc., P.Eng., President and Principal Metallurgist at Micon, with the participation of Christopher Jacobs, CEng MIMMM, Vice President and Mineral Economist at Micon, Eur Ing Bruce Pilcher, CEng, FIMMM, FAusIMM(CP), Senior Mining Engineer at Micon, Jane Spooner, M.Sc., P.Geo., Vice President at Micon, Charley Murahwi, M.Sc., P.Geo., FAusIMM, Senior Geologist at Micon, all "Qualified Persons" for the purpose of the Mana Report. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. Readers should consult the Mana Report which is available under SEMAFO's profile on SEDAR at www.sedar.com to obtain further particulars regarding the Boungou gold deposit. The Mana Report is not and shall not be deemed to be incorporated by reference in this AIF.

Unless otherwise indicated, technical information which has been disclosed since the release of the Mana Report has been prepared under the supervision of, or reviewed by, Mr. François Thibert, M.Sc.Geo, Manager, Estimate Group Resources and Reserves West Africa, our "Qualified Person".

The Mana Mine was opened in March 2008. Ore is mined using open pit methods from a number of deposits, Wona-Kona, Nyafé, Fofina and Siou. Exploration has identified the potential for underground mining at Siou.

The government of Burkina Faso has the right to hold a 10% free carried interest via a 10% equity interest in the local holding company. The local holding company is SEMAFO BF which is 90% owned by SEMAFO. The mining license for operations at Mana is held by SEMAFO BF. Exploration permits are held by Mana Mineral SARL ("**Mana Mineral**") and Ressources Tangayen SARL.

The Mana gold deposits lie within the Mana permit group located in Burkina Faso, West Africa. The property lies approximately 200 km west of Ouagadougou, the capital of Burkina Faso. It is centered on UTM coordinates 465,000 mE and 1,326,000 mN (WGS84z31).

SEMAFO holds 7 contiguous exploration permits collectively known as the Mana permit group, covering approximately 1,176.06km^2.

There are no identified environmental or social issues on the Mana property that would materially impact SEMAFO's ability to operate the mining and processing facilities.

PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Mana operation is accessible by road from the capital city of Ouagadougou. The majority of the local workforce lives in nearby villages. SEMAFO established a camp about 0.5 km to the east of Mana Mine for senior staff and expatriates, comprising living quarters, kitchen and recreational facilities.

The climate of Burkina Faso is semi-arid, with a rainy season from May to September, and a hot dry season from February to April. Work can be carried out year-round.

HISTORY

Exploration work by Mana Mineral on the Mana property started in October 1997 and led to the initial discovery of the Nyafé, Filon 67 and Wona deposits. A formal feasibility study and environmental impact study were initiated in 2004. The mining permit for development of the Wona and Nyafé deposits was granted in February 2007. Mill start-up took place on February 15, 2008. Capacity has been expanded in several phases and currently stands at 7,200 t/d in fresh ore and up to 8,000 t/d in blended ore.

GEOLOGICAL SETTING, MINERALIZATION AND DEPOSIT TYPE

The Mana district is located in the northern part of the Houndé greenstone belt. The lithostratigraphic succession is typical of greenstone belts and is characterized at the base by a major tholeiitic basaltic suite with some intercalations of argillic sedimentary rocks that are overlain by predominant pelagic and detrital sedimentary rocks (shale, sandstones, greywacke and volcanoclastics). The Mana district basalt unit has undergone submarine hydrothermal alteration with epidote, chlorite and local albite, and shows zones of strong silicification, some of which are anomalous in gold. Accessory minerals include rutile and disseminated pyrite. Free visible gold is encountered at the Wona-Kona and Siou deposits.

All deposits on the Mana property are characterized as typical West African, shear-hosted orogenic gold deposits.

EXPLORATION

Stream sample geochemistry, airborne geophysics (helicopter-borne magnetic, Mag-Helitem) and surface mapping are used to identify areas for detailed investigation. Ground geophysics is also used to test extensions of known large scale structures. Sampling via auger or rotary air blast drilling follows on fixed grids in order to reach the saprolite below the lateritic cover.

Trenching and/or RC drilling is then used as a first pass to test the auger drilling anomalies. Generally, exploration sample quality is considered as being sufficient to indicate significant gold mineralization but not representative of the overall grade associated with the deposit. Following positive results, RC drilling and core drilling are used to extend the information at depth and to delineate the mineralized bodies.

DRILLING

In 2019, a total of 158 holes (19,197 meters) were completed at Mana, primarily at Pompoi and Fofina Sud. A total of 3,492 auger holes had been completed earlier in the year at Pompoi prior to the RC drilling. Current database now contains 15,003 holes for a total of 1,481,263 m.

At Pompoi, results were disappointing due to the few local anomalous gold values obtained. Although most auger anomalies are explained by anomalous results, the holes failed to return significant gold mineralization.

At Fofina Sud, a follow-up program of four lines at 50-meter spacing was completed to assess the extension of the mineralization. Drilling covers a strike length of 250 meters. As shown in the highlight table below, significant mineralization was obtained on every section and the zone remains open along strike and at depth. Saprolite is exceptionally thick in this area reaching up to 80 meters vertically.

Hole No.	Section	From (m)	To (m)	Length (m)	Au (g/t)
MRC19-5269	1 309 400N	73	77	**4**	**2.28**
MRC19-5270	1 309 400N	44	49	**5**	**1.82**
MRC19-5272	1 309 400N	52	57	**5**	**1.58**
MRC19-5275	3 309 450N	20	27	**7**	**2.72**
MRC19-5276	1 309 500N	69	76	**7**	**2.09**
MRC19-5277	1 309 500N	32	37	**5**	**1.79**
MRC19-5278	1 309 500N	7	13	**6**	**1.04**
MRC19-5282	1 309 550N	44	47	**3**	**4.70**
MRC19-5283	1 309 550N	16	30	**14**	**1.25**
MRC19-5287	1 309 600N	32	38	**6**	**3.22**

Further drilling will be required to close off the zone and establish a preliminary resource estimation. Given its location within trucking distance from the Mana Mill, this zone could offer flexibility to the operation once an economic assessment is completed.

SAMPLING, ANALYSES AND DATA VERIFICATION

Soil sampling is a good first-pass exploration tool. It is most effective in areas of outcrop and/or near surface saprolite exposure. Individual soil samples are taken by digging a hole approximately 20 cm in diameter down to a depth of approximately 30-40 cm. Approximately 2-3 kg of sample is collected from the bottom of each hole, placed in individual plastic bags and sent to the laboratory for analysis.

Auger drilling is a cost-effective method for geochemical sampling that consists of drilling vertical holes down to the in-situ saprolite horizon along a predetermined grid. A sample of approximately 2-3 kg is taken from both the laterite/saprolite interface and within the saprolite. The sample is then sent for gold assaying using the bottle-roll method. Areas targeted for auger drilling are those where the soil cover or overburden is too thick to enable collection of samples from the saprolite zone by soil sampling.

RC samples are collected from every 1-m drill run in pre-labelled plastic bags directly from the cyclone on the drill rig. Approximately 30 kg to 40 kg of material is reduced using a tiered riffle splitter to obtain a subsample of about 2 kg which is packed in a poly bag. The remainder of the RC sample material is discarded. A small sample of chips from each 1-m interval is removed with a sieve, washed and placed in labelled chip trays for logging and future reference. RC samples are collected dry 99% of the time. Sample bags are then transported to SEMAFO BF mine site facilities for crushing, pulverizing and assaying. QC samples, including reference materials and blanks are also submitted with these samples.

Diamond core samples are collected on a maximum of 1.2-m intervals or to the lithological/alteration/mineralization boundaries, with a minimum sample length of 0.2 m. The core is cut in half lengthwise using a diamond saw, and the sampled half core placed in a plastic bag and labelled with the hole ID and depth. A sample ticket labelled with the hole ID and depth is also placed in the bag. Quality control samples are also submitted with these samples. The other half is kept for reference in core storage shelters at the Bana exploration camp.

SEMAFO uses SMF-Lab for both sample preparation and analysis of RC and core drilling and ALS-OU in Ouagadougou for assaying soil and auger drilling samples. ALS-OU is a commercial laboratory independent of SEMAFO. The ALS-OU does not have recognized accreditation, but is part of the ALS Group of laboratories that operates under a global quality management system under ISO 9001:2008, and participates in international proficiency testing programs. The SMF-Lab does not have recognized accreditation, but participates in international proficiency testing programs.

For soil and auger programs, the samples are weighed, bar-coded and logged into the sample tracking system before the laboratory personnel riffle-split a nominal 1,000-g sub-sample for BLEG analysis. The gold cyanide leach analysis involves a 24-h bottle roll, with an atomic absorption spectrometry (AAS) instrument used to measure the gold concentration of an aliquot of the leach solution. The technique has a detection range of 0.001 ppm to 10 ppm for gold.

The SMF-Lab is used for grade control samples, RC, core drilling sample analysis. All samples (i.e., exploration and mine grade control) follow exactly the same procedures except that the preparation, crushing, and pulverization of exploration samples is run independently from the mine grade control samples, on a different set of equipment in a separate building. The samples are first registered, ordered and weighed before being dried for between 8 and 10 h depending on moisture. Every ±2 kg sample is crushed to 70% passing 2 mm (-10 mesh) and quartered to get a first 250-g split of crushed material. The remaining 1.75 kg is returned to the Bana exploration camp and core shack near Nyafé for reference. The 250-g riffle split is pulverized to 85% passing 75 µm (200 mesh) and quartered to get a 50-g split. The remaining pulp (±200 g) is returned to the Bana exploration camp. All preparation equipment is flushed with barren material prior to the commencement of each run. Cleaning of equipment (e.g., crushers and pulverisers) is by compressed air between each sample. All samples are analysed using 50-g fire assay procedure with an AA finish with a detection lower detection limit of 0.01 ppm gold. Samples grading over 15 ppm gold are re-assayed using a 50-g fire assay procedure with gravimetric finish. The SMF-Lab internal QA/QC process involves standards, blanks and duplicates. Each analysis batch consists of 25 samples, of which 20 are client samples and 5 are QC samples, comprising one reference material, one duplicate (taken before crushing), two pulp duplicates, one blank (pulp). SMF-Lab also participates in regular round robin programs to monitor for bias. A minimum of 5% additional pulp check assays are performed on all batches (depending on the number of anomalies present within a given batch). Assay reports from the mine laboratory are submitted as digital data files.

QA/QC programs are in place to ensure the reliability and trustworthiness of exploration data. In order to monitor the reliability of assaying results delivered by the assaying laboratories, we have developed an assaying protocol that consists of systematically inserting blank samples, certified reference materials, field duplicates and laboratory replicates. Additionally, re-assaying of a set number of sample pulps at a secondary umpire laboratory is performed on a quarterly basis as an additional test of the reliability of assaying results.

For material assayed by SMF-Lab, samples are trucked from the field by our personnel to the Bana exploration camp. For GC material, samples are trucked directly from the deposits to the mine site laboratory. QA/QC samples are inserted by our personnel into the sample stream, either at the exploration camp for the exploration samples or in the field for the GC samples. Assay samples are placed in sealed and numbered plastic bags and delivered by batch by truck to the mine laboratory. Personnel releasing the samples for shipment to the laboratory assume responsibility for sample security and paperwork with recorded sample numbers accounted for prior to shipment to the laboratory. SMF-Lab personnel checks the received samples against the paperwork and signs off on the receipt.

Density measurements were performed on core samples from the Wona-Kona, Nyafé, Siou and Yama deposits and are derived from metallurgical studies for Fofina, Fobiri and Yaho. The equipment and the procedure used for measuring bulk density at Mana is considered appropriate for Mineral Resource estimation.

QA/QC results are reviewed by the company's QP on a quarterly basis, and an annual summary report is published that includes the referee lab results. SEMAFO considers that the sampling and analytical methods and security procedures are adequate for the purposes of the resource estimation.

Drilling data are entered directly into a laptop using Geobank Mobile software and thereafter synchronized and transferred into a central database using the Geobank data management system from Micromine. A set of predefined validation rules is run on the data as part of the importation process. Final data validation, including geological and survey data, is carried out by project geologists and/or database geologists. A separate set of validation steps is followed for assay data after it is imported into Geobank.

Sampling and logging procedures were reviewed by SEMAFO QP and found them to be appropriate and conducted to industry standards. The genetic models adopted are appropriate and represent the mineralization of the Mana deposits. The database used for the resource estimate was generated in a credible manner and properly assembled and is therefore suitable for use in estimating the mineral resource.

MINERAL PROCESSING AND METALLURGICAL TESTING

Metallurgical Testwork Programs

External metallurgical testwork relating to the Mana operation has taken place in three phases relating to the development of feed from:

- The Wona-Kona and Nyafé deposits in 2002-2007.
- The Siou deposit in 2012.
- The South sector deposits, Fofina, Fobiri and Yaho in 2012-2013.

This work comprised comminution, leaching, gravity separation and acid base accounting tests.

Given the metallurgical processing experience gained by SEMAFO with the different types of mineralization in the area, there is no plan to undertake further testwork in support of underground development at Siou.

The change of mining method (from open pit to underground mining) does not affect the metallurgical characteristics of Siou's orebody and similar recoveries are expected underground.

Tailings Characterisation

Detoxification tests using tailings samples were carried out in 2010 by SGS South Africa. These tests indicated that the sodium metabisulfite/copper sulphite method achieved an average of 99.47% removal of weak acid dissociable cyanide, with 99.48% removal of total cyanide and 99.87% removal of free cyanide. A series of ABA tests using Wona-Kona tailings samples was completed by SGS South Africa in 2013. Of the 17 samples, none of them was characterized as acid producing. Five were classified as potentially acid producing, while the remaining 12 were non-acid producing.

MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES

Reference is made to ITEM 4 – MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES.

Resource block models have been created for each individual deposit. Three-dimensional (3D) mineralized solids are first interpreted from drill hole data, limiting resources to the material inside those solids. All blocks interpolated below the surface topography or the mine surface survey as of December 31, 2019 make up the mineral inventory at that date. Blocks are classified relative to proximity to composites and corresponding precision/confidence level. Technical and economic factors are then applied to the blocks in the form of pit-optimization, optimized stope designs and cut-off grades to constrain the resources to those that present a reasonable prospect of economic extraction. Variographic analysis was undertaken.

Drill hole exploration data are stored and managed using the Geobank data management system from Micromine. Grade control data are stored and managed using the Fusion data management system from Datamine. Mineralized envelopes have been interpreted using Micromine software. Wireframes are generated using Leapfrog software. Resources were modelled using Studio RM, NPV Scheduler and MSO (Mineable Shape Optimizer) software packages from Datamine.

MINING OPERATIONS

Two mining methods will be employed at the Mana operation. Open pit mining will continue to be used at Wona/Kona and part of the Siou ore zone. Following identification of the ore at depth, underground mining will be employed in the southern part of the Siou deposit.

Open Pit Mining

Open pit mine production at Mana averages approximately 5,000 t/d of ore in bedrock, mainly from the Wona and Siou pits, that can be blended with ore from underground up to a maximum of 7,000 t/d for processing in the mill.

Pit optimization was conducted using Datamine's NPV Scheduler software based on the Lerchs-Grossman algorithm.

Geotechnical pit slope designs were completed in 2017 and updated in 2018. Following the pit wall failure at Mana in the Wona pit, Golder was mandated to complete an updated geotechnical assessment with recommendations for wall corrections and parameters for the ultimate pit outline.

SEMAFO owns the majority of the open pit equipment fleet, but it also uses local contractors' services and rental equipment.

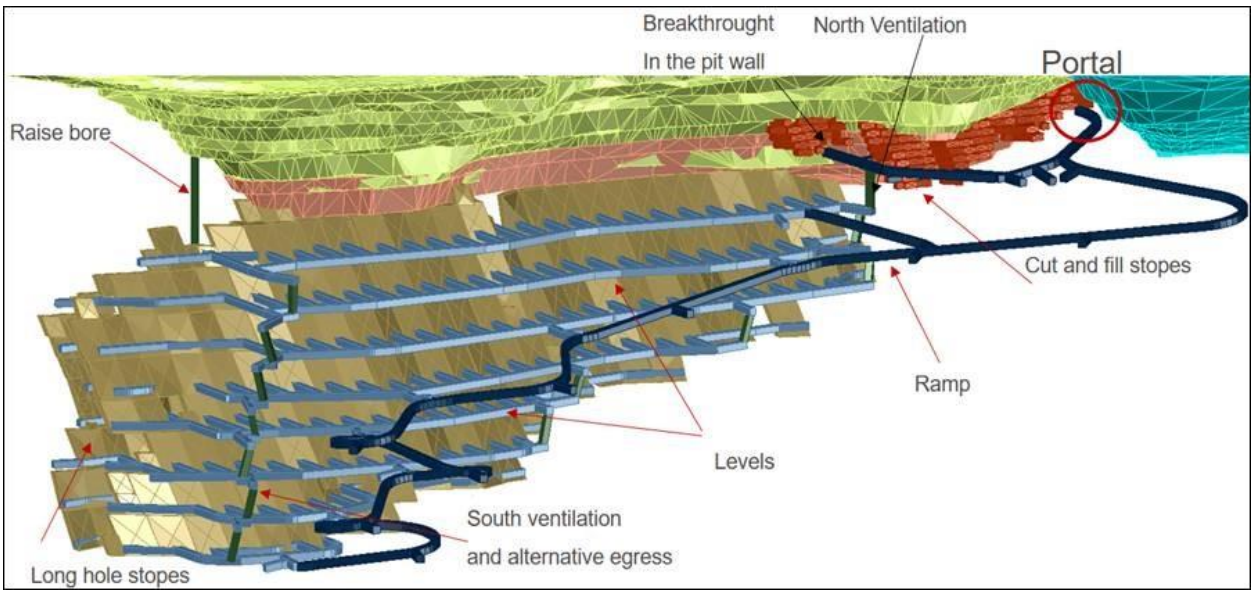
Underground Mining at Siou

The underground mining method to be used is the long hole (longitudinal retreat and transversal) which was selected because of the inclination of mineralized lenses and ore (stockwork) thickness. Long hole mining is used when a stope can be mined economically above a dip of 50º degrees. Consolidated backfill and loose rock will be used to ensure safe ore recovery in long hole mining.

Golder was retained to undertake the geotechnical and hydrogeological analysis of the underground project at Siou, including stope dimension, ground support and pillar dimension. The rock is classified as Good to Very Good for the four geological units present at Siou. Under a steady state condition and at the end of the excavation, a total water inflow of about 700 m^3/d is estimated for the underground mine.

The mine design and planning were based on the Siou geological model results. The production rate will be 2,000 t/d using AUMS as the contract miner. The figure below shows an isometric view of the mine design. In 2019, 6.8 km of lateral and 0.3 km of vertical development were completed. 10 km of grade control diamond drilling were realized. Ventilation and escapeway networks were built. We completed development with $43.2 million out of the 2019 investment budget of $48 million. 99,600 tonnes of ore at 4.6 g/t were extracted.

Siou Isometric View of Underground Mine Design



SEMAFO, 2018.

SEMAFO envisages underground production at Siou reaching capacity in the first quarter of 2020. It is expected that the mining contractor will continue underground development from 2019 to 2021.

PROCESSING AND RECOVERY OPERATIONS

Gold from the Mana deposit is recovered by a state of the art metallurgical plant which was constructed in 2008. Between 2008 and 2019, the Mana plant processed a total of 27,425,704 t of ore coming from the Wona, Kona, Nyafé, Siou and Fofina pits at an average grade of 2.72 g/t Au and an overall recovery of 90.76% which produced 2,179,869 oz of gold. The operational results correlate very well with the laboratory tests performed over the years for different ore types and for all mineralization types including oxides and sulphides.

The Mana flowsheet comprises a standard SABC comminution circuit, CIL circuit, Zadra elution circuit, gold electrowinning and tailings disposal. Slurry tails from the CIL circuit are pumped to the tailings storage facility and supernatant water is recycled back to the mill. There will be no changes in processing as a result of the change of mining method from open pit to underground mining. Projected 5-year annual production is summarized in the next table.

INFRASTRUCTURE, PERMITTING AND COMPLIANCE ACTIVITIES

Facilities at the Mana site include the open pit mines, waste rock dumps, process plant, tailings storage facility, water storage/supply dam, water runoff basins, sediment ponds, storage areas, buildings, power plant, bulk fuel storage, accommodation camps and main access road. Different areas are fenced to provide security and prevent animal access.

Facilities at the Siou site include the open pit mine and the underground development, waste rock dumps, ore rock storage pad, truck balance for ore transported from Siou to the processing plant, water storage pond, offices, workshop for regular maintenance, material storage, electricity generators, bulk fuel storage, fences, access roads, gates, security stands. The explosive site is a separately fenced area with 24-h security guard. It is used as a relay storage for specific underground detonators and packaged explosives.

Power Supply

Due to the remote location of the Mana site, power is provided by a diesel-fueled generation station located adjacent to the process plant.

An on-site bulk fuel storage facility is located close to the power plant and provides diesel for power generation, mine trucks, light vehicles and users at the process plant.

Sewage, Waste Water and Solid Waste Management

Domestic wastewater and sewage from the site facilities are collected and sent to a wastewater treatment plant. The water discharged is rigorously monitored and remains in compliance with the discharge standards of Burkina Faso. The industrial wastewater from the Wona and Siou garages and the hydrocarbon depot are treated in self-contained structures with settling separators before being discharged to the environment. All discharge is closely monitored through a sampling and analysis program.

All waste is sorted at source and placed in different coloured containers. Material such as food waste uncontaminated packaging, green waste, ordinary industrial waste, is collected in green bins and sent to the landfill site within the tailings storage facility.

Accommodation

The accommodation camp is located about 1 km to the east of the process plant and provides accommodation for 135 employees, including expatriates national senior and technical staff.

Mine and Plant Facilities

Site buildings consist of administration offices, workshops, warehouses, laboratory and reagent storage sheds which are constructed of structural steel framing and metal cladding on concrete slabs. Offices and amenity buildings are concrete block or brick construction.

The explosive site is a separately fenced area with 24-h security guard and equipped with surveillance cameras.

The Siou mining operation is located approximately 16 km east of the processing plant. Certain infrastructure items are located in the Siou sector to minimize transportation and maintenance costs, and to ensure security for mining high grade ore.

Water Supply

Operational water demand is met from tailings storage facility decant, pit dewatering (including precipitation in the pit area), surface runoff and site groundwater which is collected in raw water dams and ponds around the site. The total plant water demand is between 2.6 and 2.9 Mm^3/y. The surface water collection network consists of five collection basins located north and south of the treatment plant with a nominal holding capacity of 601,000 m^3.

Potable water for the Mana site is supplied from underground wells (Dangouna village, Somana, Wona and accommodation camps).

Tailings Storage Facility

A TSF with a storage capacity of 41 Mm^3 of tailings generated by the ore processing operations is required for the life of the project at a rate of 2.7 Mt/y. Tailings are discharged to the facility via a 5-km pipeline. The supernatant water is recycled to the plant, and there is no effluent out of the tailings pond. Ten control wells around the TSF monitor groundwater quality and fluctuations in the water table.

The facility is contained by four peripheral laterite embankment dams and has an area of approximately 130 ha and is divided into two cells, east and west, separated by a median dam. The tailings are deposited alternately in the cells to accelerate consolidation and evaporation.

Environmental Studies, Permitting and Social or Community Impact

There are no identified environmental or social issues on the Mana property that would materially impact SEMAFO's ability to operate the mining and processing facilities.

Environmental and social impact assessments, environmental and social management plans and resettlement action plans define the terms of the environmental management of the Mana mining and processing operations, as well as the compensation for people affected by the developments all in accordance with the regulations.

Environmental control, implementation of management and facility response plans, and the monitoring of extraction and treatment operations are the responsibility of the Environmental Manager. Water quality, air quality, noise and vibration, acid generating potential, waste materials, and tailings pond are subject to rigorous monitoring in accordance with the regulatory requirements of Burkina Faso and industry best practice. Due to the high impact of the rainy season, special attention is given to monitoring the overall management of water, including the tailings pond. There is no effluent discharge to the environment.

The Community Relations Department and SEMAFO Foundation are responsible for implementing social commitments and SEMAFO's social responsibilities.

An amendment to our existing operating permit is required for the development of the Siou underground mine. The application for the amendment requires a feasibility study that must first be accepted by the relevant agency together with an ESIA which must include a RAP that has been accepted by all stakeholders.

Acid Rock Drainage

Regular analyses carried out over the period 2009-2012 on samples from the Wona, Nyafé and Siou pits demonstrate that the types of materials contained in the existing waste rock can be considered as non-acid generating.

Waste Rock Storage

Waste rock is transported to one of the five storage areas located near the open pits with total capacity of 29.3 Mt. These structures are built up in layers and the slopes leveled to an average of about 20° and are surrounded by perimeter diversion ditches. Each waste rock storage area is progressively rehabilitated and revegetated.

Closure, Decommissioning and Reclamation

The mine rehabilitation and closure plan outline the recommended remediation options, including the stages and costs of implementation. By decree, the government has set up a fund to be used for the restoration of mining sites. The account of SEMAFO in this fund stood at $7,869,000, as of December 31, 2018 on an annual rehabilitation budget of $0.01/t of material mined (ore and waste rock).

The main objectives of the closure and rehabilitation plan are restoration of ecosystems and recovery of land use.

CAPITAL AND OPERATING COSTS

Capital and operating costs for all mining operations in Mana, including the Wona-Kona pit, the Siou pit and the Siou underground project are expressed in United States dollars.

Siou Underground Project Capital Cost Estimate[9]

The capital cost estimate includes all the direct and indirect costs and appropriate project estimating contingencies required to bring the Siou underground project into production, as defined by the PFS. The estimated pre-production capital cost is $51.7 million, and the sustaining development capital is $16.5 million, as shown in the table below.

Siou Underground Project Overall Capital Cost Estimate

(Million $)

Main Area	Pre-production	Sustaining	Total
Underground Mine	26.5	10.8	37.3
Maintenance and Infrastructure	13.2	2.9	16.1
Technical Services	2.9	0.5	3.4
Administration	1.5	0.2	1.7
Contingency (15%)	6.6	2.1	8.7
Subtotal	**50.7**	**16.5**	**67.2**
Operation Readiness Plan	1.0		1.0
Total	**51.7**	**16.5**	**68.2**

The project initial capital costs are based on a pre-production period from Q3 2018 through Q4 2019. Pre-production represents the period prior to the processing of the first production ore from the underground mine. The largest portion of the capital cost estimate is attributed to development costs, which have been based on contractor quotations. Mining capital includes mine access development, pre-production mining costs, contractor mobilization and other mine infrastructure that is comprised of surface facilities and portal collar construction. The development capital has been estimated based on the meterage of development, and the contractor's proposed unit cost of development for each of the different development profiles. Ventilation raise development was quoted to be completed using production drill and raise bore equipment rates.

[9] This section contains forward-looking statements. For further information regarding forward looking statements contained in this AIF, please refer to ITEM 23 – FORWARD-LOOKING STATEMENTS.

The project sustaining development capital costs and operating costs are for the period from 2020 to 2024.

Siou Underground Project Mine Operating Costs

Operating cost estimates for the project are based primarily on contract mining. Average unit costs are shown in the table below based on annual tonnes milled.

Mining Operating Cost per Tonne

Item	Units	Y -1	Y 1	Y 2	Y 3	Y 4	Y 5	Total
Mill Production	kt	65	654	704	704	705	204	3,036
Underground Mine	$/t		62.02	48.77	48.35	38.15	41.51	47.54
Maintenance and Infrastructure	$/t		17.92	17.97	18.64	17.04	11.45	17.07
Technical Services	$/t		3.14	3.15	3.41	3.35	3.34	3.20
Administration	$/t		1.43	1.43	1.55	1.53	1.53	1.45

LOM average operating cost for mining the underground project is forecast to be approximately $70/t milled.

PRODUCTION 2019

The following table presents 100% of the gold production statistics for the Mana Mine for the financial year ended December 31, 2019. The Mana Mine is owned and operated by SEMAFO BF in which we own a 90% equity interest.

Production Update[1]	Year ended December 31				
	2019	**2018**	**2017**	**2016**	**2015**
Gold production (ounces)	135,700	181,000	206,400	240,200	255,900
Plant ore processed (tonnes)	2,061,200	2,573,900	2,739,900	2,753,300	2,399,100
Weighted head-grade (g/t Au)	2.28	2.36	2.46	2.88	3.63
Weighted recovery (%)	90	93	95	94	91
Total cash cost ($/ounce)[2]	762	786	655	548	493
All-in sustaining cost ($/ounce)[3]	1,095	1,056	942	720	645

1 Mill start-up of the Mana Mine began in February 2008. 2019 production figures include a 10-week shutdown at the Mana Mine.

2 Total cash cost is a non IFRS financial performance measure with no standard definition under IFRS and represents the mining operation expenses and government royalties per ounce sold.

3 All-in sustaining cost is a non-IFRS financial performance measure with no standard definition under IFRS and represents the total cash cost, plus sustainable capital expenditures and stripping costs per ounce.

TAXES AND ROYALTIES

Our tax rate is 17.5% at Mana. All shipments with gold spot prices lower or equal to $1,000 per ounce are subject to a royalty rate of 3%, a 4% rate is applied to all shipments with gold spot prices between $1,000 and $1,300 per ounce, and a 5% royalty rate is applied on all shipments with a gold spot price greater than $1,300 per ounce.

MANA 2020 EXPLORATION BUDGET[10]

A budget of $2 million has been established to follow up targets identified by the geologic review carried out by an external consulting firm in 2019. The bulk of the 3,800-meter RC drill campaign will be carried out on three different areas around Siou. We will also be conducting an underground drill program to test if the mineralization extends at depth below the existing underground mining plan.

[10] The statements in this section are forward-looking. For more information on forward-looking statements, see ITEM 23-FORWARD-LOOKING STATEMENTS.

OTHER PROPERTIES

Bantou Property

INTRODUCTION

Unless otherwise indicated, technical information which has been disclosed herein has been prepared under the supervision of, or reviewed by, Mr. Richard Roy Vice-President, Exploration and Mr. François Thibert, M.Sc.Geo, Manager, Estimate Group Resources and Reserves West Africa, each a “Qualified Person”.

PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Bantou gold zone is part of the Dynikongolo permit located approximately 170 kilometers south of Mana, along the prolific Houndé Greenstone Belt that hosts Mana and multiple other gold mines. The Dynikongolo permit is a single exploration permit covering 250 km^2. The permit was transferred to Birimian Resources SARL on April 30th 2013, a company 100% owned by SEMAFO through the acquisition of Orbis Gold.

Access to Bantou is by means of Route Nationale RN01, an all-weather bitumen road from Ouagadougou, the capital of Burkina Faso, through Boromo to the Pâ junction. From there, travel is via RN12 followed by RN20, also all-weather bitumen road through the town of Diebougou, to the Bondigui junction. From Bondigui, travel is made via successions of laterite roads to the property, located some 62km to the southwest, the last portions hardly practicable during wet season.

HISTORY

No significant exploration is known to have occurred on the Dynikongolo permit prior to 2010 when Orbis commenced rock chip sampling, a program of 5 trenches and mapping. Airborne geophysics (magnetic and radiometric) was also conducted in 2010, while some ground IP surveys were conducted between November 2012 and April 2014. An extensive soil and rock chip sampling campaign was initiated in 2012 at a spacing of 800m by 100m followed by a reduced spaced grid of 200m by 50m over anomalous areas later that same year, the geochemistry was completed in 2013.

An extensive drilling program was undertaken in 2013, which included 32 RC drill holes and 10 DD holes mostly near the known Bantou artisanal mining site that resulted in the confirmation of the Bantou gold deposit. A few additional drill holes were completed at Bantou in 2014 at the same time as a regional scale drill program was carried over the license. In 2017, a small DD campaign was completed by SEMAFO. The 2017 program aimed at confirming the “at depth” extension of the Bantou zone as well as to carry out some metallurgical tests on the mineralized zones. 2018 has seen some 2,659m of DD (mostly multi-purpose drilling at Bantou) and 21,619m of RC mostly on a regional exploration program around the Bantou deposit.

Finally, in 2019, a total of 5,103m of DD and 65,138m of RC were achieved on the Dynikongolo permit. Most of the DD were carried out on the depth extension of the Bantou zone as well as few exploration holes to follow good exploration results (in particular on Bantou Nord and Bantou Proximal). The aggressive RC program was first oriented as a regional exploration program but did later include follow-up and ultimately detailed drilling at Bantou Nord and Bantou Proximal.

On the Karankasso part of the project, many drilling programs were undertaken by different companies before SEMAFO’s acquisition of Savary in April 2019. Prior to Savary, other companies (Avion, Delta Gold, Goldbelt and Sarama) combined for 442 RAB holes (13,503m), 411 AC holes (13,209m), 242 RC holes (22,035m) and 12 DD holes (2,130m). Starting from 2012 on Bio and Niawé and then 2015 on Serakoro 1; Savary completed 351 AC holes for 16,823m, 495 RC holes totalising 56,794m and 36 DD holes for a total of 5,912m. Between July and November 2019, 149 RC holes were added by SEMAFO totalizing 17,969m; the 2019 SEMAFO drilling campaign was one of regional exploration on new targets.

GEOLOGICAL SETTING, MINERALIZATION AND DEPOSIT TYPES

The Bantou mineralization is constrained by two parallel zones of cherts and banded iron formations ("**BIF**") separated by a late mafic intrusive dyke. The stratigraphy appears consistent from hole to hole and shows excellent continuity and regularity. The gold is spatially associated with pyrite-magnetite bands and stringers with locally minor galena. Regionally, the favourable horizon sits within a folded sequence of volcanoclastic rocks, underlain by mafic volcanics. Bantou is located on the east flank of a property-scale synclinal fold, while the west flank outcrops within the permit, approximately four kilometers to the west. Permit-scale mapping completed in 2018 shows that the favourable horizon extends approximately 10 kilometers both north and south of the Bantou mineralization.

The Bantou deposit appears to show evidence of primary BIF-type mineralization although orogenic enrichment could also have contributed to the higher-grade portions. The relationship with galena, and the 1:1 ratio between silver and gold in the pyrite suggest primary type mineralization as opposed to orogenic origins.

Bantou Nord is a very different deposit type, and the mineralization is associated with very fine, pervasive, disseminated pyrite. The mineralization shows no deformation and/or hydrothermal alteration typical of orogenic styles. It is considered synvolcanic in origin, and auriferous mineralization is found indiscriminately within a series of felsic dykes and sills and the intermediate volcanics that they intrude.

Finally, the mineralization at the Karankasso Zones is similar in origin for all the occurrences and associated with quartz-vein development in sheared, folded, sericitized, silicified and carbonatized volcanics, and/or sediments. When present, felsic dykes are commonly sheared, foliated or fractured and spatially associated with the mineralization. The Karankasso Zones are considered typical orogenic style deposits located along a regional deformation zone flanking the western limit of the Houndé Belt, which also hosts the Wona-Kona deposit at our Mana property to the north.

EXPLORATION

On Dynikongolo permit, regional soil sampling and rock chip sampling programs commenced in 2012. Permit scale mapping and rock chip sampling was conducted during the 2013 and 2014 field season and updated in 2017.

An extensive soil campaign was initiated in 2012 at a spacing of 800m by 100m followed by a reduced spaced grid of 200m by 50m over anomalous areas later that same year, the geochemistry was completed in 2013. Orbis defined many large-scale high order (+20 ppb Au) gold-in-soil anomaly on the Dynikongolo exploration permit, including the area surrounding the Bantou discovery, as well as the Safia Prospect, Tankoro and the Bantou West. The Bantou soil anomaly, defined within a 5 km by 2 km survey area, includes multiple zones of higher-order anomalism that have received minimal exploration drilling to date. Many exploration targets remain to be tested.

Airborne geophysics (magnetic and radiometric) was also conducted in 2010 covering the entire exploration license. In addition, some ground IP surveys were conducted between November 2012 and April 2014, in three separate areas covering Bantou, the Safia Prospect as well as the Tankoro Prospect.

Additionally, 5 trenches were completed between February 2011 and March 2011, with an average length of approximately 66 m. All the trenches were completed in the Bantou area. The trenches were hand dug to an approximate depth of 1.5 m and chip samples collected at 1 m intervals from the side wall close to the base of the trench. The 5 trenches showed significant intersections, although most of them were either anomalous or less than two meters in thickness. The best results were obtained from trench DYTR005, which returned an intersection of 4.00m at 1.06 g/t Au (horizontal width; not true width) based on a lower cut-off of 0.5 g/t Au.

At Karankasso, regional soil sampling and rock chip sampling programs were carried out between 1997 and 2001 by Delta Gold, followed by Goldbelt between 2005 and 2007 and finally Avion from 2010 to 2011. Sarama and Savary continued the work from 2012 till 2016. In total 25,684 samples were collected, covering most of the exploration licences at a spacing of 400m by 50m.

Airborne geophysics (magnetic and radiometric) was initiated by Avion in 2010 and covered the current Niawé and Bio permits. Serakoro 1 was later covered in 2015 by Savary. In addition, some ground IP surveys were conducted between

2010 and April 2011, over the main structural trends of the now called Bio and Niawé permits. Starting in 2012, Savary continued to extend the IP coverage by adding small survey extension almost each year.

DRILLING

At the beginning of the year, exploration to the north of Bantou led to the discovery of the Bantou Nord deposit. Promising initial results forced the reorientation of exploration priorities to accelerate the delineation of the mineralization. Budgets were updated accordingly, and drill rigs were assigned to the project to develop the resource. In parallel, drilling continued at Bantou focusing on extending the mineralization along plunge and at Bantou Proximal West.

An internal resource calculation on the Bantou Zone announced February 11, 2019 evaluated the maiden inferred resource at 361,000oz grading 5.35g/t Au.

Meanwhile, the acquisition of Savary was announced in the first quarter and closed on April 30, 2019. Exploration of greenfield targets commenced thereafter on the Karankasso part of the property on geophysical/soil trends that host the known deposits but have remained undrilled to date.

Fourth-quarter results clearly illustrated the potential outside of the known occurrences with the discovery of several promising new targets as presented below:

Hole No.	From (m)	To (m)	Length (m)	Au (g/t)	Zone
KARC19-0127	63	84	**21**	**14.63**	Tiébi
KARC19-0136	29	37	**8**	**1.31**	Tiébi Ouest
KARC19-0136	84	86	**2**	**5.42**	Tiébi Ouest
KARC19-0162	25	29	**4**	**1.14**	Tiébi Ouest
KRC19-0531	87	91	**4**	**2.52**	Bantou Est
KRC19-0538	132	136	**4**	**1.92**	Bantou Est
KRC19-0538	158	161	**3**	**3.04**	Bantou Est
KRC19-0632	124	127	**3**	**1.65**	Bantou NW
KRC19-0634	56	60	**4**	**2.00**	Bantou NW

Tiébi is located 4 kilometers northeast of the Kueredougou Ouest deposit along what appears to be a splay of the main regional structure hosting the Karankasso deposits. Mineralization is hosted in a strongly silicified-sericitized, sheared volcanosediment and felsic intrusives zone, mineralized with varying amounts of disseminated pyrite. Hole KARC19-0127 (14.6 g/t Au over 21 meters) represents the last easternmost hole of the section and will be followed upon in 2020. This section was the only drilling completed on this interpreted splay over a strike length of more than 3 kilometers.

On February 24, 2020, we announced that inferred mineral resources on the Bantou project had increased to 2.2 million ounces of gold as of year-end 2019. A total of 1.2 million drill-bit ounces was added in 2019 complementing the 0.7 million ounces added through the tuck-in acquisition of Savary Gold's Karankasso properties.

Highlights

- Inferred mineral resource estimate of 2.2M oz representing 51 Mt at an average grade of 1.37 g/t Au
- The largest deposit, Bantou Nord, was discovered in 2019 and totals 1.1M oz of pit-constrained inferred resources, representing 36.1Mt at 0.95 g/t Au with a pit-shell strip ratio of 1:1
- Bantou deposit, in addition to 282,000 ounces of inferred open-pit resources, includes 152,000 ounces of underground inferred resources grading 6.66 g/t Au at a cut-off grade of 2.00 g/t Au and remains open at depth

The inferred resource comprises three main areas. The majority of the tonnes and ounces are centered around the Bantou and Bantou Nord Zones. The Bantou Nord Zone is located 1.5 kilometers north of the Bantou Zone with the remaining Karankasso Zones (referred to under Mineral Resource Estimate as "Others") are located 15-30 kilometers from the main zones. The Bantou Nord resource is pit-constrained and although it has the lowest grade, its low 1:1

strip ratio would enhance the economics of the project. Sixty-five percent of the Bantou Zone resource is pit-constrained, and the remaining resource was estimated using a cut-off grade of 2 g/t Au below the pit. The Bantou Zone remains open at depth and offers potential for expansion of additional underground resources.

Bantou was the most active project in terms of exploration during 2019 with a total 96,669.7m drilled in 663 holes mostly as RC drilling. Bantou Nord alone accounted 88 holes and 15,031 m in an effort to rapidly outline the extent of the mineralized zone and allow for a preliminary resource calculation. The remainder was distributed based on merit over 24 additional targets. The database for the entire project now encompasses 148,201m of drilling distributed over 2,137 drill holes, all categories included.

SAMPLING, ANALYSES AND DATA VERIFICATION

On Bantou and Bantou Nord deposits, RC samples are collected from every 1-meter drill run representing approximately 30 kg to 40 kg of material that is reduced using a tiered riffle splitter to obtain a subsample of about 2 kg. A small sample of chips from each 1-meter interval is removed with a sieve, washed and placed in labelled chip trays for logging and future reference. Diamond core samples are collected on a maximum of 1.2-meter intervals or to the lithological/alteration/mineralization boundaries, with a minimum sample length of 0.2 meters. Core is cut in half lengthwise using a diamond saw. The other half is kept for reference in core storage shelters. Quality control samples, including reference materials and blanks are also submitted with these samples. All samples are sent for crushing, pulverizing and assaying to (i) SEMAFO mine site facilities at Mana; or (ii) ALS Minerals Services laboratories in Ouagadougou, Burkina Faso, or Yamoussoukro in Côte d'Ivoire. All sample assays are reported by standard 50-gram fire assaying-AA finish or gravimetric finish at (i) SEMAFO mine site facilities at Mana; or (ii) ALS Minerals Services laboratories in Ouagadougou, Burkina Faso, or Yamoussoukro in Côte d'Ivoire.

ALS-OU/Yamoussoukro are independent laboratories located in Ouagadougou, Burkina Faso or Yamoussoukro in Côte d'Ivoire. The laboratories do not have recognized accreditation, but are parts of the ALS Group of laboratories that operates under a global quality management system under ISO 9001:2008, and participates in international proficiency testing programs. SMF-Lab is owned and operated by SEMAF. The laboratory is not accredited but regularly participates in international proficiency testing programs.

Transportation and security of samples are provided by an outside contractor. It occurs on a regular basis with security guards. Personnel releasing the samples for shipment to the laboratory assume responsibility for the sample security and paperwork with recorded sample numbers accounted for prior to shipment to the laboratory.

Drill program design, QA/QC and interpretation of results is performed by qualified persons employing a QA/QC program consistent with NI 43-101 and industry best practices. An internal quality control and quality assurance program is in place throughout the sampling program, using blind duplicates, blanks and recognized industry standards. Approximately 5% of sample pulps are sent to secondary laboratories for assay checks. In addition, both analytical laboratories provide their own internal QA/QC process. For ALS-OU, each analysis batch consists of 84 samples, 78 of which are client samples and six are QC samples, comprising two reference material, one duplicate (taken before crushing), two pulp duplicates, one blank (pulp). For SMF-Lab, each analysis batch consists of 25 samples, 20 of which are client samples and 5 are QC samples, comprising one reference material, one duplicate (taken before crushing), two pulp duplicates, one blank (pulp). SMF-Lab also participates in regular round robin programs to monitor for bias. A minimum of 5% additional pulp check assays are performed on all batches (depending on the number of anomalies present within a given batch). QA/QC results are reviewed by the company's QP on a quarterly basis and an annual summary report is published which include the referee lab results.

Bulk density measurements were collected by using the Archimedes immersion technique (weight in air divided by the difference between the weight in air and the weight in water) and is considered reasonable for an Inferred Resource.

Drilling data are entered directly into a laptop using Geobank Mobile software and thereafter synchronized and transferred into a central database using the Geobank data management system from Micromine. A set of predefined validation rules are run on the data as part of the importation process. Final data validation, including geological and survey data, is carried out by project geologists and/or database geologists. A separate set of validation steps is followed for assay data after it is imported into Geobank.

For the other deposits, the procedure for handling reverse-circulation drill chips comprises initial riffle-splitting of the rock chips from one-meter drill length samples into approximately 2.5-kilogram samples, as well as description and logging into a database. A duplicate 2.5-kilogram sample, prepared at the same time as the assay sample, is kept as a reference for each sample. NQ-size core assay samples are first logged into a database and then are sawn in half with half of the core submitted for analysis; the length of the core samples depends on logged geological controls with samples varying from 0.3 metres to 2.0 metres in length. A sample duplicate and assay blank were inserted sequentially every 5 to 14 samples, and an assay standard was inserted every 29 to 34 samples. This results in 8% of the assayed samples being reference/blank/control samples. Blanks and duplicates were preferentially inserted in visually mineralized zones to better test the assay results. This sampling procedure was periodically reviewed by a qualified person. All assay samples were collected at site by staff from SGS Burkina Faso SA ('SGS') from Ouagadougou, Burkina Faso where sample preparation and analysis were performed. Each sample was dried, crushed to 75% passing 2 mm and then split to 1.5 kg by rotary splitter. This split was pulverized to 85% passing 75 microns. Fifty grams of the pulverized material was analysed for gold via fire assay with an atomic absorption spectroscopy (AAS) finish. SGS operates according to ISO 17025 standards and institutes a full Quality Assurance/Quality Control (QA/QC) program consisting of insertion of internal blanks, standard reference material, repeats and reject splits which, in total, accounts for up to 25% of all determinations conducted. All standards and blank control samples returned results within expected ranges.

SEMAFO considers that the sampling and analytical methods and security procedures are adequate for the purposes of the resource estimation.

METALLURGICAL TESTING

A preliminary metallurgical testwork program was undertaken as part of the Bantou property assessment.

Preliminary tests were conducted in two phases, in July 2015 and December 2017. The tests were performed using HQ and PQ core samples from drilling campaigns by former property owner, Orbis Gold Limited. Seven (7) mineralized intersections were studied from two (2) subparallel zones.

The tests were realized by the metallurgical laboratory of SMF-Lab. The initial in-house tests were performed to validate if Bantou deposit responded well to standard cyanidation process route.

This section summarizes the metallurgical tests and draws preliminary conclusion on gold recovery by standard CIP/CIL process.

Testwork Description

Three samples were received in July 2015, and seven samples in December 2017 by the SMF-Lab. The samples were crushed and homogenized to be tested according to the Mana Mill parameter which is a SABC/CIL circuit at 75 µm with normal air addition.

The grinding tests were realized on 1.2 kg samples by a laboratory ball mill and divided into 2 to realize bottle leach tests in duplicate.

The following testwork parameters were:

- Cyanide concentration = 1 000 ppm
- pH: 10-11
- Leaching time: 30 hours
- Lead nitrate: 500 ppm

The lead nitrate was added due to higher cyanide consumption in the first leach test. Noted that all reagents were added at the beginning of the tests followed by leaching of 30 hours. No reagents adjustments were made during the tests.

Results

The results of the leach tests reveal the following points:

- Bantou samples react well to standard cyanidation. Gold recovery is above 90% in 15 of 20 leaching tests.
- An analysis of solid tail releases by "leach diagnosis" shows that gold was associated with sulphides.
- For a few samples, there is a large difference between analysed vs calculated head grades. These deviations suggest free gold presence.
- The need for lead nitrate in the leach reaction indicates the presence of sulphides. Generally, lead nitrate presence requires a strong oxygen addition to control the gold passivation reaction. Unfortunately, Mana's laboratory is not equipped to realize leaching tests with oxygen addition.

Conclusion

- The leach tests indicate that Bantou samples respond well to standard cyanidation process with +90% gold recovery.
- The leach tests also indicate that Bantou samples probably contain free gold and active sulphides. The leaching test with a lead nitrate addition helped to control the presence of sulphides and gold passivation.
- Further tests will be required by an independent metallurgical laboratory to optimize the process route, reduce reagent consumption, revalidate results and optimize gold recovery. Variability tests will also have to be performed as well as mineralogical study.

MINERAL RESOURCE ESTIMATE

Reference is made to ITEM 4 – MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES.

Resources are presented undiluted and in situ and are considered to have reasonable prospects for economic extraction. This mineral resource estimate is the result of 625 drill holes (79,641 metres) in the resource area, including 123 drill holes (24,207 metres) completed by SEMAFO on Bantou and Bantou Nord from July 2017 to August 2019. Geological interpretation of the various deposits is based on lithologies, mineralization style and structural features. The estimate was prepared using a block model constrained within 3D wireframes of the principal mineralized domains. The 3D wireframing was generated in Leapfrog Geo, a modelling software, from hand selections of mineralized intervals. High-grade assays were capped. Cappings were determined in each area from statistical studies on groups of zones sharing similar mineralization characteristics. Cappings vary from 13 g/t Au to 80 g/t Au. Capped assays were composited within the mineralization domains into 1-meter length composites, except for Kueredougou Ouest (2-meter length). Values for gold were interpolated into blocks using a 3-pass ordinary kriging (OK) interpolation method using Studio RM software package from Datamine. Estimation parameters are based on composite variography analyses. Bulk densities from 1.98 g/cm3 to 2.8 g/cm3 were used based on weathering.

Preliminary open-pit optimization algorithm was run using NPV Scheduler software package from Datamine on the estimated grade block models to constrain the resource. The mineral resource estimate comprises mineralization contained within preliminary pit shells at cut-off grades ranging from 0.43 to 0.86 grams of gold per tonne. The cut-off grades were calculated using the following economic parameters: a long-term gold price of $1,500/oz; gold recovery ranges from 65% to 93%; a weighted average waste mining cost of $2.20/ tonne and a weighted average ore mining cost of $2.37/tonne, both based on high level preliminary mine sequencing. Processing and G&A costs combined range between $16.30/tonne and $26.00/tonne. Pit optimization slopes were 45 degrees in oxidized material and 50 degrees in fresh rock. Mineralization below the pit shell at Bantou was estimated at a cut-off grade of 2 grams of gold per tonne.

The inferred mineral resource in this estimate has a lower level of confidence that that applied to an indicated mineral resource and must not be converted to a mineral reserve. The quantity and grade of reported inferred mineral resources in this news release are uncertain in nature and there has been insufficient exploration to define these inferred mineral resources as indicated or measured mineral resources, and it is uncertain if further exploration will result in upgrading them to these categories.

The Bantou mineral resource estimate with an effective date of December 31, 2019 was prepared by SEMAFO and reviewed and audited by DRA MET-CHEM, Montréal, Québec in accordance with NI 43-101.

Zone	Tons (Mt)	Grade (g/t Au)	'000 oz Au
Bantou Nord	36.11	0.95	1,101
Bantou	2.26	5.98	434
Others	12.74	1.73	709
Total*	**51.11**	**1.37**	**2,245**

*Total may not add up due to rounding errors.

BANTOU 2020 EXPLORATION BUDGET[11]

A budget of $4 million has been allocated to the Bantou Property, which will involve a 19,300-meter drill program that is a continuation of last year's suspended work on the properties and designed to test prospective areas outside of the existing resources. We remain committed to our resource goal of 2.5 - 3.0 million ounces by the end of 2020.

[11] The statements in this section are forward-looking. For more information on forward-looking statements, see ITEM 23-FORWARD-LOOKING STATEMENTS.

Yactibo Property

INTRODUCTION

Information in this section is based on the technical report entitled "Nabanga Project – NI 43-101 Technical Report – Preliminary Economic Assessment", dated effective September 30, 2019 (the "**Yactibo Report**"), prepared by Patrick Pérez, P.Eng. (DRA/Met-Chem), Yves A. Buro, P.Eng. (DRA/Met-Chem), Ewald Pengel, MSc., P.Eng. (DRA/Met-Chem), François Thibert, MSc., P.Geo. (SEMAFO) and Richard Roy, P.Geo. (SEMAFO), "Qualified Persons" for the purposes of the Yactibo Report. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. Readers should consult the Yactibo Report which is available under SEMAFO's profile on SEDAR at www.sedar.com to obtain further particulars regarding the Nabanga gold deposit. The Yactibo Report is not and shall not be deemed to be incorporated by reference in this AIF.

Unless otherwise indicated, technical information which has been disclosed since the release of the Yactibo Report has been prepared under the supervision of, or reviewed by, Mr. Richard Roy, Vice-President, Exploration and Mr. François Thibert, M.Sc.Geo, Manager, Estimate Group Resources and Reserves West Africa, each a "Qualified Person".

PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Nabanga exploration permit is located in the south-east of Burkina Faso, approximately 250 km to the southeast of Ouagadougou. The permit is centered on latitude 11° 18' 03" North and longitude 0° 29' 58" East in the geographic coordinate system. The Nabanga permit has an irregular shape covering 178.50 km². The southeastern sector of the project is approximately 5 km to the NW extremity of the Kompienga Lake formed by the hydro-electrical dam built some 25 km further to the SE.

We formerly held five contiguous exploration permits collectively known as the Yactibo permit group. Two (2) permits were relinquished, and the Kamsongo, Napadé and the Nabanga permits were retained. The Nabanga permit is registered under our wholly-owned subsidiary Birimian Resources SARL. The latest renewal brings the expiry date of the Nabanga permit to April 1, 2020. It is mainly regulated by the 2003 Mining Code which gives the exploration permit holder the exclusive right to explore for the minerals requested, and the right to convert it into an industrial operating permit (*Permis d'exploitation industrielle*). The exploration permit is accompanied by a Mining agreement (*Convention minière*) that supplements the provisions of the Mining Code.

The Nabanga permit is subject to a 10% carried ownership interest to the Government of Burkina Faso, and a graduated royalty based on the gold price. The original vendor of the permit retains a 1% net profit royalty, payable upon any future gold sales.

The property is accessible from Ouagadougou by travelling 220 km to the east via all-weather, paved (*Route Nationale*) RN04 to Fada-N'Gourma. Proceeding approximately 80 km southward along paved RN18 will lead to about 15 km east of the property. A gravel road that crosses the Kompienga River provides the main access to the property, different sectors of which can be reached by various roads, drill tracks and trails.

HISTORY

Four of the initial Yactibo permits (Nabanga, Kamsongo, Ouargaye and Yacti - the latter two no longer part of the Yactibo permits) were acquired by Orbis Gold in 2007 and 2008, through certain Orbis Gold subsidiaries in Burkina Faso. The Napade permit was later added to the Yactibo permit group in 2011 to fill the gap between the Nabanga and Kamsongo permits. The Yactibo permit group was acquired through the acquisition of Orbis Gold.

No exploration is known to have occurred on the Yactibo permits prior to Orbis Gold's acquisition of the permits prior to 2008. Initial exploration by Orbis Gold on the property in 2010 comprised reconnaissance and field mapping, delineating the artisanal mining sites and implementing satellite imagery data. Several soil sampling programs were

initiated across the Yactibo property, as well as airborne magnetic-radiometric survey that showed the Nabanga structure extending over approximately 9 km.

In 2011, Orbis confirmed the presence of a gold deposit on the Nabanga 500 m long Central and 600 m long North Zones by RC holes. Additional drilling in 2011-2012 provided the data for the initial resource estimate prepared by Snowden in 2012. Deeper holes were drilled in 2013 and soil sampling and induced polarization ("**IP**") surveys identified possible strike extensions and new mineralized bodies. Several phases of historical metallurgical test work were completed for the Nabanga project. An initial Joint Ore Reserves Committee (JORC) compliant resources estimate was performed by Snowden in August 2012 that was based on 239 RC and 14 diamond drill holes and a cut-off grade of 0.5 g/t Au, a minimum mining width of 1.5 m and a top cut at 70 g/t Au. Grade interpolation was performed using the Ordinary Kriging method.

The property has not been the subject of prior commercial gold production, but gold has been extracted for an unknown period of time from shallow artisanal workings.

Follow-up diamond drilling below the initial resource was completed in 2013 with mixed results. According to Orbis Gold (2013), the deep diamond drilling indicates a significant weakening of the Nabanga structure below 200 m vertical depth. An additional five RC drill holes were completed by Orbis Gold in 2013 along strike to the northeast, with no significant mineralization intersected, effectively closing off the resource to the northeast. The 2018 exploration program was designed to test a revised interpretation of Nabanga which suggested the zone could remain open at depth. A total of 24 holes was drilled along the Nabanga structure, with results appearing to confirm the shallow plunge of the mineralization. In addition, the north ore shoot remains open along strike and at depth.

GEOLOGICAL SETTING, MINERALIZATION AND DEPOSIT TYPES

The Yactibo permit group straddles a major northeast trending shear separating the Youga Belt in the northwest from the Diapaga Belt in the southeast, the latter hosting the Nabanga gold deposit and being the easternmost Belt in Burkina Faso. The Diapaga Belt dominantly comprises intermediate volcanics rocks, sediments, granites and gneiss, with subordinate common matic volcanic rocks and intrusive complexes.

The overall strike of the Nabanga mineralized structure is NE-SW and the dip varies between 55° and 70° toward the northwest. The mineralization is arranged as a series of shoots plunging at 45º to the NE and has an average thickness of 3.2 m. The Nabanga deposit is divided into the North, Central and Southern Extension Zones by three (3) cross faults. The weathering profile in the Nabanga deposit area is relatively shallow, generally reaching a depth of 10 m to 21 m.

EXPLORATION

Exploration by SEMAFO on the Nabanga and adjacent permits included establishment of a line grid, field mapping, outlining the different artisanal mining sites, geochemical surveying and an IP/Resistivity and magnetometer survey. In 2018, 38 quarter core samples were submitted for whole-rock analysis in order to characterize the geochemical signature of the hydrothermal alteration associated with the mineralization. In addition, 8,530 auger holes were drilled to a nominal depth of 5 m for a cumulative total of 41,923 m, which generated 16,994 samples. Generally, auger drilling returned anomalous values that confirmed the regional NE geophysical trends in the Yactibo permits. Beside the PEA discussed below, there was no exploration in 2019.

DRILLING

On September 30, 2019, the Corporation announced positive results from the PEA on Nabanga.

Highlights

- Pre-tax NPV of $147 million and after-tax NPV of $100 million, using a 5% discount rate
- LOM gold production of 571,000 ounces at all-in sustaining cost of $760/oz and a gold recovery

- of 92% during the 8 years of operations
- Over the LoM, combined open-pit and underground production is estimated at 2.98 million tonnes at
- an average grade of 6.47 g/t Au for 626,000 ounces of gold
- Pre-production capital expenditure of $84 million, including 20% contingency, and $56 million in LoM sustaining capital
- Project economics (base case at $1,300/oz gold price):
- After-tax 5% NPV: $100 million
- After-tax IRR: 22.6%
- Payback period: 4.4 years
- Preferred mining method - open-pit/ underground mining on the upper and at-depth portions of the ore zone, respectively
- Opportunities exist to improve returns through an increase in resources and additional cost saving measures in the mining operations and development.

Exploration Potential

On the exploration front, the Nabanga deposit remains open to the north and many of the ore shoots are open at depth. Hole NADD18 0005, drilled on the northernmost section, to date returned 5.17 g/t Au over 3.4 meters along the plunge direction, confirming the continuity of the mineralized shoot. In addition, the remainder of the 800-km^2 property is largely underexplored with many untested soil and auger anomalies within trucking distance of the deposit. More specifically, auger drilling carried out in 2019 within a 10-kilometer radius of the deposit identified gold geochemical anomalies that could offer proximal satellite zones of gold mineralization.

A technical report for the PEA prepared in accordance with NI 43-101 was filed at www.sedar.com on October 14, 2019.

No drilling was completed on the project in 2019, therefore the database remained unchanged with 78 RC drill holes (8,820m) and 25 diamond drill holes (7,148.2m)

SAMPLING, ANALYSIS AND DATA VERIFICATION

From 2010 to 2013, all drilling and sampling was managed by Orbis Gold. Sampling and assaying practices were audited by Snowden and were considered adequate for the purposes of early exploration. While some minor errors were likely present in the geochemical assay data, it is believed these are minimal and not material to the assay data for the purposes of early exploration. The RC and diamond core drilling completed at Nabanga by Orbis Gold between 2010 and 2012 included independent QC samples with the sample batches, the results of which show reasonable precision and accuracy have been achieved. Additionally, the diamond core drilling, is achieving excellent core recovery. Assaying for gold has primarily been completed at the SGS-OU, which, based on the results of the QC samples and multiple inspections, has achieved reasonable precision and analytical accuracy. The drill hole assay data for the Nabanga gold deposit is reasonable for use in resource estimation.

Assay data within the database was also audited by Snowden and given the results of the assay certificate checks and QA/QC result, it is believed the assay data within the database is robust.

From 2017, SEMAFO quality control (QC) and quality assurance (QA) programs were set in place to ensure the reliability and trustworthiness of exploration data. SEMAFO assaying protocol is designed to monitor the reliability of assaying results delivered by the assaying laboratories. It consists of systematically inserting blanks, CRM, field duplicates and lab replicates. Additionally, re-assaying of a set number of sample pulps at a secondary umpire laboratory is performed on a quarterly basis as an additional test of the reliability of assaying results.

Sample preparation and analysis were performed at the ALS-OU in Ouagadougou. For every batch of 78 samples assayed by ALS-OU, two reference material samples, two blanks and two pulp duplicates are inserted. QC samples are assigned fixed positions within the sampling sequence by geologists. The CRMs are supplied by ROCKLABS Limited for a variety of gold grade ranges suitable for this type of deposit. QC results are monitored by SEMAFO

geologists as part of the assay data validation process during data loading. Sample submissions falling outside of acceptable rejection limits are investigated and resubmitted for re-assay, if deemed necessary.

Transportation and security of samples are provided by an outside contractor. It occurs on a regular basis with security guards. Personnel releasing the samples for shipment to the laboratory assume responsibility for the sample security and paperwork with recorded sample numbers accounted for prior to shipment to the laboratory.

QA/QC results are reviewed by the company's QP on a quarterly basis, and an annual summary report is published that includes the referee lab results. SEMAFO considers that the sampling and analytical methods and security procedures are adequate for the purposes of the resource estimation.

Drilling data are entered directly into a laptop using Geobank Mobile software and thereafter synchronized and transferred into a central database using the Geobank data management system from Micromine. A set of predefined validation rules are run on the data as part of the importation process. Final data validation, including geological and survey data, is carried out by project geologists and/or database geologists. A separate set of validation steps is followed for assay data after it is imported into Geobank.

MINERAL PROCESSING AND METALLURGICAL TESTING

The tests performed included ball mill work index test and SMC tests. ALS Ammtec performed two (2) Bond Work Index tests. The material can be considered very hard and medium abrasive.

ALS Ammtec performed cyanidation tests. Process development undertaken during the PEA aimed at establishing a conventional sulphide gold/silver processing facility considering the constructability, operability and maintainability of the processing facility. The results indicate that material has refractory characteristics as a high concentration of cyanide is required to obtain good leach results.

MINERAL RESOURCE ESTIMATES

Reference is made to ITEM 4 – MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES.

As of December 31, 2019, the mineral resources are estimated at 3.4M tons grading 7.7 g/t Au for a total of 840,000 oz. of gold. All resources are in the inferred category. The resource estimation is based on 395 drill holes (RC and DD combined) totaling 57,488 meters and a revised interpretation of the mineralization that suggests a shallower plunge of the higher-grade zones of gold mineralization.

Category	Tonnes Mt	Au g/t	Ounces K oz
Inferred resources	**3.4**	**7.7**	**840**

Nabanga mineral resources are reported above at a cut-off grade of 3.0 g/t Au.

The estimate was prepared using a block model constrained within 3D wireframes of the principal mineralized domain reflecting the interpreted shear zone and veining. Mineralized envelopes have been interpreted using Micromine software. Values for gold were interpolated into blocks using a 3-pass ordinary kriging (OK) interpolation method. High grade assay values were capped at 70 g/t Au and a bulk density of 2.7 g/cm^3 was applied based on the arithmetic average density measurements for quartz vein material. The mineral resource estimate is reported above a cut-off grade of 3 grams of gold per ton based on the assumption most of the resource would likely be mined by selective underground mining techniques. The resource estimate assumes a recovery of 81% based on the historic metallurgical test work completed for the previous NI 43-101 by Snowden in 2012. Resources were modelled using Studio RM software package from Datamine.

MINING OPERATIONS

The current mine plan is to mine Nabanga mineral resources via open pit mining and underground mining methods. It is estimated that approximately 616 Kt of mineralized material is extractable by conventional surface mining operations and 2.364 Mt of mineralized material is extractable by underground and open pit methods.

The total life of the mine has been estimated at approximately nine (9) years, including the preproduction period.

A production schedule (mine plan) was developed for the Project to produce a total of 571K oz of gold over the life of mine, using the mill recovery of 92% and a processing rate of 360 Kt of mineralized material per year.

PROCESSING AND RECOVERY OPERATIONS

The Nabanga concentrator is designed to process a nominal 360,000 tonnes of Run-of-Mine (ROM) mineralized material per year and produce 571,000 troy ounces of gold over the life of mine.

The ROM mineralized material will be crushed by a jaw crusher and transported the stockpile by conveyor. The crushed material is reclaimed from the stockpile by apron feeder to a SAG mill. The SAG mill discharge is screened, and the screen oversize is returned back in the SAG mill. The SAG screen undersize is pumped to the ball mill circuit in closed circuit with the cyclones. The cyclone overflow flows to the flotation circuit. The flotation concentrate will ground to 25 micron and processed in an intensive leach reactor, while the flotation tailings will be processed in a more conventional CIL circuit, followed by the carbon elution, electro-winning and refining. The estimated combined recovery gold recovery is 92%.

INFRASTRUCTURE, PERMITTING AND COMPLIANCE ACTIVITIES

The existing (*Route Nationale*) RN18 connects the town of Fada-N'Gourma to the border between Burkina Faso and Togo. Starting approximately 80 km South of Fada-N'Gourma, a new access road connecting the RN18 to the Nabanga Process Site will be developed over a distance of about 11 km.

The power demand of SEMAFO site was determined to be 5.8 MW based on the estimated connected loads, running loads and running power for the process operation. The power plant consists of five (5) generators using Light fuel oil (LFO) fuel (four in operation, one in stand-by, maintenance or repair).

In addition to the concentrator building that will house the processing equipment, the site will include administration and mine offices, an accommodation camp and cafeteria, a warehouse, a metallurgical laboratory, and a security gate.

CAPITAL AND OPERATING COSTS

Pre-production capital expenditure is currently estimated at $84 million, including 20% contingency, and at $56 million in LOM sustaining capital. The all-in sustaining cost will average $760/oz over the LOM.

NABANGA 2020 EXPLORATION BUDGET[12]

No budget has been allocated for exploration at Nabanga in 2020.

[12] The statements in this section are forward-looking. For more information on forward-looking statements, see ITEM 23-FORWARD-LOOKING STATEMENTS.

ITEM 6 - COMPETITIVE CONDITIONS

Significant and increasing competition exists for the limited number of acquisition opportunities available. Competitors for acquisitions include large established mining companies with greater financial and technical resources than us. As a result, we may be unable to acquire additional attractive mining properties on terms we consider satisfactory.

Furthermore, gold is traded on world markets with benchmark prices for gold based on the London Bullion Market, which may be subject to considerable fluctuations. Gold can be easily sold on many markets throughout the world and it is difficult to ascertain its future market price at any particular time.

Increasing competition in the mining sector has also had an important impact of the level of demand on various services, equipment, supplies and parts necessary to carry out our operations. The shortage of any needed good or service may cause cost increases or delays in delivery time hereby materially adversely affecting production schedules as well as our financial condition and results of operations.

Moreover, we and other companies in the mining industry compete for qualified and key personnel with strong knowledge and expertise in the mining environment. We must find and retain such qualified employees in order to continue to operate successfully.

ITEM 7- SALES AND REFINING

We sell gold doré to a refiner at the market price. Since there are several other available gold refiners, we are not dependent upon our current refiner.

ITEM 8 - FOREIGN OPERATIONS

Our operations are concentrated in West Africa, where we operate our Mana Mine and Boungou Mine. Burkina Faso has historically fostered a relatively good investor friendly environment. However, for the last 18 months, the security environment has significantly deteriorated. Other than the customary corporate restrictions on doing business within their corporate objective, i.e. the exploration for and operation of a gold mine, our subsidiaries are not subject to any additional restrictions by the governments of the states in which they operate. See ITEM 3 - GENERAL DEVELOPMENT OF THE BUSINESS - Three Year History – 2019 and ITEM 11 - RISK FACTORS.

Our everyday operations in Africa are exposed to various levels of legal, political, economic and operational risks and uncertainties associated with operating in a foreign jurisdiction. They require permits from various local authorities. Such activities are subject to local laws and regulations governing exploration activities, mining activities, exports, taxation, labour standards, occupational health and safety, toxic substances, waste disposal, land use and environmental protection. Companies such as SEMAFO that engage in the development and operation of mines and related facilities have to deal with increased costs and delays ensuing from the need to comply with applicable laws, regulations and permits.

Burkina Faso is a member of the Economic Community of West African States and has adopted a single system of business laws and implementing institutions, the OHADA rules, which harmonizes to a great extent applicable business and commercial laws and is generally based on civil law principles, very similar in nature and substance to those applicable in the province of Québec. The similarities in the applicable legal context and institutions provide us with greater ease in its operation and evaluation of risks as we operate in a somewhat familiar legal environment.

The government of Burkina Faso holds 10% in our operating corporate entities, SEMAFO BF and SEMAFO Boungou. The government is represented on the corporate board of directors of these subsidiaries along with representatives of SEMAFO who represent the majority of Board representatives. Local management as well as executive management of SEMAFO work closely with representatives of the government on a continuing basis in order to advance business. Executive management, including the President and Chief Executive Officer, travel to Burkina Faso to participate in board of director meetings of our operating subsidiaries.

Despite the inherent cultural differences resulting from operating in a foreign jurisdiction, the common language, the presence of a number of nationals in the management team and on the Board as well as a continuous closely knitted relationship between management and local operations have had a positive impact on our operations and relationships with local stakeholders. For instance, local management in Burkina Faso includes the presence of a former Mining Minister as well as former President of the Chamber of Mines of Burkina Faso and, since 2012, Mr. Tertius Zongo, a former Prime Minister of Burkina Faso, sits on the Board. In addition, Mrs. Flore Konan lives in Côte d'Ivoire and used to work for an entity controlled by the national government. This provides management and the Board with the ability to breach certain cultural barriers and allows for the appropriate understanding of legal, business and operational concerns. See ITEM 11-RISK FACTORS.

ITEM 9 - ENVIRONMENTAL PROTECTION

Each step of our operations is subject to environmental regulations. We recognize that appropriate environmental management is essential to the proper carrying out of mining operations and activities. As such, our goal is to minimize the environmental impacts of our processes and activities. We make every effort to protect the environment against the risks that may arise from our activities and encourage any action that contributes towards the responsible management of natural resources. We implement our corporate Environmental Policy and comply in all material respects with applicable environmental laws. Our thoroughness and performance have allowed us to minimize our financial risks, including environmental offences and damage to our reputation. See ITEM 10 – SOCIAL AND ENVIRONMENTAL POLICIES and ITEM 11 - RISK FACTORS.

ITEM 10 - SOCIAL AND ENVIRONMENTAL POLICIES

To our knowledge, all our operations are in compliance with all environmental laws and regulations in all material respects.

We are conscious of our social and environmental responsibilities and as such, have adopted a series of corporate policies. Such corporate policies are available on our website and include an environmental policy and a social responsibility policy in which we reiterate our commitment to conduct our business in a manner that promotes sustainable development and an improvement in the social welfare of the regions in which we operate. The policies set out our commitment to limit as much as possible the impact of our activities on the environment and the surrounding communities.

Accordingly, our environmental specialists have established and abide by strict process management systems so as to protect natural resources and minimize our environmental footprint. Our environmental specialists are responsible for all facets of water and waste management, environmental risks and incidents, as well as the implementation of employee training and awareness programs.

Our environmental control systems and initiatives are closely monitored with detailed reports completed monthly. Specialized independent firms conduct regularly scheduled environmental audits. All recommendations are incorporated into our continuous improvement process.

Furthermore, our Social Responsibility Policy demonstrates our commitment to social responsibility and outlines our guiding principles in this regard. We are committed to promoting social responsibility by continually improving our knowledge, our understanding of challenges and our actions. In our host countries, we seek to establish environments that are conducive to improving living conditions through investments in community projects, job creation, training, and improving the quality of life of the people and communities.

Along with our expatriate employees, we conduct ourselves as guests in the host countries and assume our responsibilities towards the local communities and environment. We recognize the fundamental importance of our employees, in terms of their health and safety, well-being and working conditions. We also rely on our employees and contractors in our commitment to respect the environment and the neighboring communities. The Social Responsibility Policy helps uphold our values and benefits all of our employees, suppliers, shareholders and the communities in which we operate.

SEMAFO Foundation has the goal of supporting communities and improving human conditions through its actions and investments in community development projects. The mining code adopted on June 26, 2015 requires companies with industrial mining licenses to pay 1% of their monthly turnover (excluding taxes) or 1% of the value of extracted minerals into a local development fund. The State is also required to pay 20% of its mining revenues into this fund. Investment from such revenues should therefore be invested in community development with regard to infrastructures, such as schools, health centers, roads, etc. In respect of Boungou, SEMAFO Foundation's activities focus on SEMAFO Boungou's environmental and social management plan therefore directed towards strengthening pastoral capacities and infrastructures, improving food crops and irrigating vegetable plots. More information about SEMAFO Foundation, including its current projects, is available at www.fondationsemafo.org and in our Management Discussion and Analysis for the financial year ended December 31, 2019.

We are committed to fostering an open dialogue with communities surrounding our deposits as part of our commitment to sustainable mining. SEMAFO Foundation has already enhanced access to fresh drinking water and improved sanitary conditions for the Boungou communities. The Foundation's priority for the area involves reinforcement of its educational capacity through construction and support of schools and the launch and equipping of agricultural projects with which to generate community revenue.

SEMAFO Foundation's activities have impacted some 1.7 million Burkinabe since 2009, strengthening school capacity and enrolment; improving access to water, health care and microcredits; enhancing sanitary conditions; and guiding local participants in over 20 agri-food projects with which to generate community revenue. In 2019, under a new approach, the Foundation shifted the focus of its activities towards promotion of entrepreneurship and revenue-

generating activities. Its new vision is inspired by the fact that most community development in the area has already involved the construction of infrastructure; the need to support young people as they cannot all be employed by the mine; the mining fund for local development; and by the need to prepare for after mine closure.

In 2015 and 2016, we were honoured to be recipient of the grand prize for Corporate Social Responsibility of Mining Companies in Burkina Faso, which acknowledges not only the results of many years of continuous community commitment, but also the dedication of our teams. In 2016, we garnered a prize for the environment in addition to prizes for female entrepreneurship, communities and local development. In 2018, we ranked in Corporate Knight's 2018 Future 40 Responsible Corporate Leaders in Canada.

ITEM 11 - RISK FACTORS

As a mining company, we face the financial and operational risks inherent to the nature of our activities. These risks may affect our financial condition and results of operation. As a result, an investment in our common shares should be considered speculative. Prospective purchasers or holders of our common shares should give careful consideration to all of our risks factors. For a complete description of the various risk and uncertainties please see the "Risks and Uncertainties" section of our MD&A for the financial year ended December 31st, 2018 filed on SEDAR at www.sedar.com and available on our website at www.semafo.com.

ITEM 12 - DIVIDENDS

We currently do not anticipate declaring dividends in the near future. However, the amount of any future dividend payments will be subject to evaluation and approval by the Board, based on our financial condition, capital requirements, growth plans and gold price as well as our financial requirements to finance future growth and other factors which the Board may consider appropriate in the circumstances.

ITEM 13 – MARKET FOR SECURITIES

Our common shares are listed on the TSX and the NASDAQ OMX under the symbol "SMF".

The following table shows, for our common shares traded on the TSX, the monthly price ranges and volume traded during the 2019 financial year.

MONTH	High (C$)	Low (C$)	Volume Traded
January	3.20	2.60	47 275 702
February	3.70	2.80	46 254 153
March	3.99	3.50	54 413 673
April	3.96	3.51	23 174 570
May	4.20	3.42	33 336 608
June	5.29	4.15	64 710 857
July	5.57	4.81	54 220 334
August	5.75	4.61	48 998 577
September	4.99	4.11	44 009 490
October	4.63	3.76	37 475 102
November	4.22	2.60	73 339 653
December	2.90	2.36	51 022 937

Source: TSX

ITEM 14 - DIRECTORS AND EXECUTIVE OFFICERS

The Board is currently comprised of eight (8) directors who are elected annually at each annual meeting of shareholders to hold office for one year or until his or her successor is elected or appointed, unless he or she resigns or his office becomes vacant.

The following table sets forth for each director and executive officer of SEMAFO, his name, place of residence, his principal occupation during the past five years as well as the date of his election or nomination as director or executive officer. The directors and executive officers have provided their respective information.

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Terence F. Bowles Nun's Island (Québec) Canada	Director since May 10, 2011 independent	Mr. Bowles is Chair of the Environment, Health & Safety and Sustainable Development Committee and a member of the Audit Committee. Terence Bowles is President and Chief Executive Officer of the St. Lawrence Seaway Management Corporation since 2010. Prior to this appointment, he served as President and Chief Executive Officer of the Iron Ore Company of Canada, from 2001 to 2010. Following his graduation from Université Laval in Québec City, Mr. Bowles joined Quebec Iron and Titanium (QIT), now Rio Tinto Iron and Titanium, where he also served as President and on the board of directors of an African subsidiary. Mr. Bowles is on the board of the St. Lawrence Seaway Management Corporation and the Chamber of Marine Commerce. He is a member of the Québec *Ordre des Ingénieurs* and obtained an Institute of *Corporate* Directors designation.
Daniel Buron Saint-Lambert (Québec) Canada	Director since August 5, 2019 independent	Mr. Buron is a member of the Audit Committee and the Human Resources and Corporate Governance Committee. Since 2004, Mr. Buron has served as Senior Vice-President and Chief Financial Officer of Domtar Corporation and Domtar Inc. and previously held other senior finance positions within Domtar. Before joining Domtar in 1999, he held various finance positions with a leading firm in the commercialization and development of IT applications, solutions and tools as well as with a major international accounting firm, which allowed him to gain exposure to Africa. Mr. Buron has 30 years of experience in finance. He is a member of the Québec Chartered Professional Accountants (CPA) Order and a member of the Institute of Corporate Directors. He currently sits on the board of *Nouveau Monde Graphite Inc.*, a TSX-V listed company.

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Hélène Cartier Montréal (Québec) Canada	Director since May 9, 2019 independent	Ms. Cartier is a member of the Environmental, Health & Safety and Sustainable Development Committee. Hélène Cartier began her career in the mining industry on the Cambior Inc. team. She was Vice President, Environment and Sustainability for Osisko Mining Corporation where she was closely involved in the development and implementation process of the Canadian Malartic mine, particularly with respect to environmental issues and community relations. Since 2017, she is Vice President, Environment and Sustainable Development at Falco Resources Ltd where she leads the permitting and social acceptability process for the Horne 5 project. From 2014 to 2016, she worked at *La rue des Femmes de Montréal,* a center dedicated to raising awareness on the issue and challenges of homelessness. Holder of a degree in Industrial Engineering and a Bachelor of Laws, Ms. Cartier has been involved in the environmental field for more than twenty years. She is a member of the *Ordre des ingénieurs du Québec*. Ms. Cartier is a certified corporate director from the *Collège des administrateurs de société* and has served on the boards of directors of Falco Resources Ltd, Group Technosub Inc. (a privately held, non-listed company) and the Classica Festival.
Benoit Desormeaux Candiac (Québec) Canada	Director, President and Chief Executive Officer	Benoit Desormeaux became President and Chief Executive Officer in August 2012. He had been our Executive Vice-President and Chief Operating Officer since 2004, and previously held the positions, successively, of Corporate Controller and Chief Financial Officer. Prior to joining SEMAFO in 1997, Mr. Desormeaux was with Deloitte LLP, involved principally in corporate audits in the manufacturing sector. Mr. Desormeaux is a Chartered Professional Accountant and a member of *Ordre des Comptables Professionnels Agréés du Québec*. He sits on the board of directors of Groupe Technosub inc. (a privately-held, non-listed company) and is Chair of the board of directors of SEMAFO Foundation.
Sylvain Duchesne Orford (Québec) Canada	Vice-President, Construction & Engineering	Mr. Duchesne is Vice-President, Construction and Engineering. He has held this position since November 2014 and prior to his appointment, was General Manager, Construction and Engineering and Director of Metallurgy. Mr. Duchesne has over 30 years of experience in managing gold and polymetallic operations. Prior to joining SEMAFO in 2005, he served as mill superintendent at Campbell Resources, Aur Resources and Noranda, respectively. Mr. Duchesne graduated as a mining engineer from Polytechnique Montréal in 1987 and is a member of *Ordre des Ingénieurs du Québec*.

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Flore Konan Abidjan, Côte d'Ivoire	Director since May 14, 2015 independent	Mrs. Konan is a member of the Audit Committee. Mrs. Konan joined the board of directors of Société Internationale d'Investissements et de Participation ("**SIDIP**") in October 2019. SIDIP is the investing and equity ownership arm of Eranove, a holding company involved in the production, transportation and distribution of water and electricity in Africa that has over 9,000 employees. Between October 2011 and December 31, 2019, when she retired, Mrs. Konan was Director of Internal Controls of Eranove, where she had been working for close to 35 years, climbing up the corporate ladder. She was the Chief Executive Officer of *Compagnie Ivoirienne d'Electricité*, an Eranove subsidiary, from 2008 to 2011. Mrs. Konan is the former Chair of the Board of ECOBANK Côte-d'Ivoire, a subsidiary of ECOBANK Transnational Incorporated, present in 32 African countries and listed on the *Bourse Régionale des Valeurs Mobilières* (BRVM).
John Jentz Toronto (Ontario) Canada	Vice-President, Corporate Affairs & Investor Relations	Mr. Jentz joined the company in December 2017 as Vice-President, Corporate Development and Investor Relations. He has over 20 years' experience in corporate finance and mergers and acquisitions, mostly within the mining sector. Previously, Mr. Jentz served as a senior member of the mining teams at both regional and global investment banking firms. A chartered accountant, he holds a B.Sc. degree in actuarial science from University of Western Ontario and an MBA from McMaster University.
John LeBoutillier, C.M.[1] Montréal (Québec) Canada	Director since January 25, 2006 Chairman since January 1st, 2018 independent	Chair of SEMAFO's Board. John LeBoutillier is a director of Mazarin Inc. and Asbestos Corporation Limited, two affiliated companies. He was chairman of the board of directors of Industrial Alliance Insurance and Financial Services Inc. from 2005 to 2017. Between 1996 and 2000, Mr. LeBoutillier was President and Chief Executive Officer of Iron Ore Company of Canada, as well as President and Chief Executive Officer of Sidbec-Dosco Inc. (now ArcelorMittal Long Products Canada G.P.) from 1983 to 1996. Mr. LeBoutillier is a recipient of the Order of Canada.
Gilles Masson[2] Laval (Québec) Canada	Director since January 25, 2006 independent	Mr. Masson is Chair of the Audit Committee and a member of the Environmental, Health & Safety and Sustainable Development Committee. Gilles Masson was appointed Chair of SEMAFO's Audit Committee in 2007. He spent 36 years with the firm PricewaterhouseCoopers LLP, Chartered Professional Accountants, including 25 years as partner. His clientele included large national and international companies, some of which operated in the mining sector. A chartered professional accountant, Mr. Masson is a member of the Institute of Corporate Directors.

[1] Mr. John LeBoutillier served as director of Stornoway Diamond Corporation ("**Stornoway**") from July 20, 2011 until November 1, 2019. Stornoway filed for protection under the *Companies' Creditors Arrangement Act* ("**CCAA**") on September 9, 2019. The CCAA process was concluded by order of the Superior Court of Québec in November 2019 and Stornoway's operating subsidiary emerged from such process, continuing its operations on a going concern basis after the successful implementation of its restructuring transactions. In November 2019, Stornoway made a voluntary assignment into bankruptcy pursuant to the *Bankruptcy and Insolvency Act*.

[2] Mr. Gilles Masson was, but is no longer, a director of Malaga Inc. ("**Malaga**"). In June 2013, Malaga filed a notice of intention to make a proposal pursuant to the provisions of Part III of the *Bankruptcy and Insolvency Act* (Canada). Pursuant to the notice of intention, Raymond Chabot Inc. was appointed trustee in Malaga's proposal proceedings and in that capacity monitored and assisted Malaga in its restructuring efforts. These proceedings had the effect of imposing an automatic stay of proceedings that protected Malaga and its assets from the claims of creditors and others while Malaga pursued its restructuring efforts. Malaga submitted a proposal dated October 4, 2013 to its creditors; the proposal was accepted by the creditors pursuant to a vote held on December 13, 2013 and approved by judgment of the Superior Court rendered on January 7, 2014.

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Alain Mélanson Boucherville (Québec) Canada	Vice-President, Human Resources	Mr. Mélanson joined SEMAFO as Vice-President, Human Resources in September 2009. Prior to this appointment, he spent two and a half years at Bell Aliant Regional Communications as Vice-President, Human Resources, Communications and Public Affairs. Previously, Mr. Mélanson served as Vice-President, Human Resources, Communications and Public Affairs, Bell Nordiq from 2001 through December 2006. He has also served in senior management and executive positions at Groupe Laperrière & Verreault, Coca-Cola and Labatt Breweries. Mr. Mélanson is a graduate of the University of Laval in industrial relations and is a member of the Québec Order of Certified Human Resources Professionals and Industrial Relations Counsellors.
Martin Milette Mont Saint-Hilaire (Québec) Canada	Chief Financial Officer	Mr. Milette was appointed Chief Financial Officer of SEMAFO in May 2006. Mr. Milette has been with the company since 2005 when he joined as Director, Development and Special Projects. Previously, he worked for eight years as Senior Manager, Assurance and Advisory Services at PricewaterhouseCoopers LLP where he was principally active in the high-tech and mining sectors. Mr. Milette is a Chartered Professional Accountant, a member of *Ordre des Comptables Professionnels Agréés du Québec*, and a Certified Public Accountant in the USA. Mr. Milette oversees all aspects of the Finance and IT functions of the company.
Patrick Moryoussef Dollard-des-Ormeaux (Québec) Canada	Vice-President, Mining Operations	Mr. Moryoussef has served as Vice-President, Mining Operations since joining SEMAFO in September 2004. Prior to his appointment, he was general manager and administrator at South-Malarctic Exploration and previously senior project engineer at Les Mines McWatters. Following graduation, he served as mining engineer at the Campbell Mine of Placer Dome Canada and held the position of Open Pit Mine Captain, Engineering at Placer Dome Canada's Sigma Mine. Mr. Moryoussef is a 1994 mining engineering graduate from McGill University and a member of *Ordre des Ingénieurs du Québec*.
Eric Paul-Hus Saint-Lambert (Québec) Canada	Vice-President, Law, Chief Compliance Officer and Corporate Secretary	Mr. Paul-Hus is Vice-President, Law, Chief Compliance Officer and Corporate Secretary of SEMAFO and has been with the company for over 10 years. Prior to his appointment, he spent five years in private practice, including one year in secondment with the *Autorité des Marchés Financiers* (former Québec Securities Commission) in the Corporate Finance and Continuous Disclosure Group. Subsequently, he held several positions of increasing responsibility, including Vice-President, during his 12-year tenure with a major Canadian telecommunications company where he continued to practice business law, specializing in securities, M&A and corporate law. Mr. Paul-Hus is a lawyer and member of the Québec Bar since 1993.
Richard Roy Verdun (Québec) Canada	Vice-President, Exploration	Mr. Roy was appointed Vice-President, Exploration in 2018. He has been with the company since 2009 when he joined as exploration manager. Mr. Roy has over 30 years of experience in the base and precious metal mineral resource industry including nine years' experience in underground mine geology. Before joining SEMAFO, he designed and implemented successful exploration programs and mine feasibility programs in Mexico and North America, working for companies such as Aur Resources, Placer Dome and several junior companies. Mr. Roy holds a B. Sc. degree in geology from Concordia University in Montréal and is a member of the *Ordre des géologues du Québec*.

Name, province and country of residence	Position with the Corporation	Principal Occupation during the past 5 years
Tertius Zongo Ouagadougou, Burkina Faso	Director since May 14, 2012 independent	Mr. Zongo is a member of the Environmental, Health & Safety and Sustainable Development Committee and of the Human Resources and Corporate Governance Committee. Tertius Zongo served as Prime Minister and Head of Government of Burkina Faso from 2007 until 2011 and was Ambassador Extraordinary and Plenipotentiary of Burkina Faso to the United States of America from 2002 until 2007. Previously, Mr. Zongo held positions of increasing importance within the government of Burkina Faso including as Minister of State for Planning and Budget and Minister of Economy and Finance. Prior to his career with the government of Burkina Faso, Mr. Zongo was an academic at the University of Ouagadougou and the National School of Financial Controls where he taught accounting, business economics and financial management. He sits on the board of ECOBANK Côte-d'Ivoire (listed on the *Bourse Régionale des Valeurs Mobilières* (BRVM)) where he chairs the Governance Committee and sits on the Audit Committee.

The number of our common shares beneficially owned or controlled or directed, directly or indirectly, by all directors and executive officers of the Corporation as a group, is 652,995 representing approximately 0.2% of our issued and outstanding common shares as at March 3, 2020.

ITEM 15 - EMPLOYEES

At the end of our last financial year, we had 3,072 people working for us of which 1,235 are employees.

ITEM 16 - INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

No director or executive officer of SEMAFO, no person that beneficially owns or controls or directs, directly or indirectly, more than ten percent (10%) of any class or series of outstanding voting securities of SEMAFO, and no associate or affiliate of any such persons, has a material interest in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or will materially affect us or one of our subsidiaries.

ITEM 17 - MATERIAL CONTRACTS

The following contracts are the material contracts of the Corporation entered into within the most recently completed financial year, or before the most recently completed financial year that are still in effect, other than contracts entered into the ordinary course of business:

i. the Mining Agreement dated June 19, 2017 between Burkina Faso and SEMAFO Boungou with respect to the exploitation of gold deposits

ii. the Rights Agreement entered into between the Corporation and Computershare Investor Services Inc. on March 15, 2011 as amended on May 15, 2014 and May 4, 2017, respectively

iii. the Mining Agreement dated October 2, 2007 between Burkina Faso and SEMAFO BF with respect to the exploitation of gold deposits.

See ITEM 2- THE CORPORATION “CAPITAL STRUCTURE-RIGHTS”, and ITEM 5- MINERAL PROJECTS.

ITEM 18 - INTERESTS OF EXPERTS

SEMAFO's independent auditors PricewaterhouseCoopers LLP, have audited our consolidated financial statements for the year ended December 31, 2018. PricewaterhouseCoopers LLP confirmed that they are independent with respect to SEMAFO within the meaning of the Code of Ethics of the Ordre des comptables professionnels agréés du Québec.

Certain disclosure with respect to mineral resources and mineral reserves of the Mana Mine and the results of the PFS for the development of underground mineral reserves at the Mana gold project contained in this AIF is derived from the Mana Report prepared under the supervision of Richard M. Gowans, P.Eng., President and Principal Metallurgist at Micon, with the participation of Christopher Jacobs, CEng., MIMMM, Vice President, Charley Murahwi, P.Geo., FAusIMM, Senior Geologist, Eur Ing Bruce Pilcher, CEng, FIMMM, FAusIMM(CP), Senior Mining Engineer and Jane Spooner, P.Geo., Vice President.

Certain disclosure with respect to the Tapoa permit group – Boungou gold deposit contained in this AIF is derived from the Tapoa Report dated March 23, 2016 and prepared under the supervision of Neil Lincoln, Vice-President, Business Development and Studies at Lycopodium, with the participation of Marius Phillips, MAusIMM (CP), Principal Process Engineer at Lycopodium, Glen Williamson, Principal Mining Engineer at AMC Consultants (Canada) Ltd, John Graindorge, Principal Consultant – Applied Geosciences at Snowden, Jean-Sébastien Houle, Eng. from WSP Canada Inc. and Timothy Rowles, MAusIMM (CP) from Knight Piésold Consulting, "Qualified Persons" for the purposes of the Tapoa Report. All newly added reserve and resource updates were reviewed and approved by Mr. François Thibert, M.Sc.Geo, Manager, Estimate Group Resources and Reserves West Africa, our "Qualified Person" (as defined in NI 43-101).

Certain disclosure with respect to the Yactibo permit group – Nabanga gold deposit contained in this AIF is derived from the Yactibo Report dated September 30, 2019 and prepared by Patrick Pérez, P.Eng. (DRA/Met-Chem), Yves A. Buro, P.Eng. (DRA/Met-Chem), Ewald Pengel, MSc., P.Eng. (DRA/Met-Chem), François Thibert, MSc., P.Geo. (SEMAFO) and Richard Roy, P.Geo. (SEMAFO), "Qualified Persons" for the purposes of the Yactibo Report.

ITEM 19 - AUDIT COMMITTEE INFORMATION

The following information is provided in accordance with Form 52-110F1 – *Audit Committee Information Required in an Annual Information Form* ("**Form 52-110F1**") of Multilateral Instrument 52-110 - *Audit Committees* ("**MI 52-110**") adopted by the *Canadian Securities Administrators*.

Audit Committee Charter

The mandate of the Audit Committee appears in Schedule B of this AIF.

Composition of the Audit Committee

The current members of the Audit Committee are Mr. Gilles Masson (Chair), Mr. Terence F. Bowles, Mr. Daniel Buron and Mrs. Flore Konan.

Each member of the Audit Committee is financially literate, which means the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by our financial statements. As demonstrated hereinafter, all the members of the Committee have an education and experience which are relevant to their responsibilities.

Mr. Gilles Masson was appointed to the Board and to the Audit Committee of SEMAFO in January 2006. In May 2007, he was appointed Chair of the Audit Committee. Mr. Masson is a member of the *Ordre des comptables agréés du Québec* and he is a member of the Institute of Corporate Directors. He worked for 36 years for the firm PricewaterhouseCoopers LLP, Chartered Accountants, including 25 years as a partner. His clientele included, among others, large national and international companies doing business in the mining sector. He retired on December 31, 2005. Since then, Mr. Masson has been acting as member of the board of directors of several public companies.

During his career, Mr. Masson gained a great deal of experience in auditing public companies operating in the mining, manufacturing and distribution sectors. He understands Canadian and US generally accepted accounting principles (GAAP), International Financial Reporting Standards (IFRS), generally accepted auditing standards (GAAS), as well as regulations for presenting financial information for public companies listed in Canada and the United States. He further developed a relevant experience in dealing with audit committee requirements, including recent changes brought by new regulations. Mr. Masson understands the accounting principles used by the Corporation to prepare its financial statements and the general application of such accounting principles in connection with the accounting for estimates, accruals and reserves.

Mr. Terence F. Bowles was appointed to SEMAFO's Board and Audit Committee on May 10, 2011. He is also Chair of the Environment, Health & Safety and Sustainable Development Committee. Terence Bowles is President and Chief Executive Officer of the St. Lawrence Seaway Management Corporation since 2010. Prior to this appointment, he served as President and Chief Executive Officer of the Iron Ore Company of Canada, from 2001 to 2010. Following his graduation from Université Laval in Québec City, Mr. Bowles joined Quebec Iron and Titanium (QIT), now Rio Tinto Iron and Titanium, where he also served as President and on the board of directors of an African subsidiary. Mr. Bowles is on the board of the St. Lawrence Seaway Management Corporation and the Chamber of Marine Commerce. He is a member of the Québec *Ordre des Ingénieurs* and obtained an Institute of *Corporate* Directors designation.

Mr. Daniel Buron was appointed to the Board and to the Audit Committee of SEMAFO in August 2019. He is also a member of the Human Resources and Corporate Governance Committee. Since 2004, Mr. Buron has served as Senior Vice-President and Chief Financial Officer of Domtar Corporation and Domtar Inc. and previously held other senior finance positions within Domtar. Before joining Domtar in 1999, he held various finance positions with a leading firm in the commercialization and development of IT applications, solutions and tools as well as with a major international accounting firm, which allowed him to gain exposure to Africa. Mr. Buron has 30 years of experience in finance. He is

a member of the Québec Chartered Professional Accountants (CPA) Order and a member of the Institute of Corporate Directors. He currently sits on the board of *Nouveau Monde Graphite Inc.*, a TSX-V listed company.

Mrs. Flore Konan was appointed to the Board and to the Audit Committee of SEMAFO in May 2015. Mrs. Konan joined the board of directors of SIDIP in October 2019. SIDIP is the investing and equity ownership arm of Eranove, a holding company involved in the production, transportation and distribution of water and electricity in Africa that has over 9,000 employees. Between October 2011 and December 31, 2019, when she retired, Mrs. Konan was Director of Internal Controls of Eranove, where she had been working for close to 35 years, climbing up the corporate ladder. She was the Chief Executive Officer of *Compagnie Ivoirienne d'Electricité*, an Eranove subsidiary, from 2008 to 2011. Mrs. Konan is the former Chair of the Board of ECOBANK Côte-d'Ivoire, a subsidiary of ECOBANK Transnational Incorporated, present in 32 African countries and listed on the *Bourse Régionale des Valeurs Mobilières* (BRVM).

The members of the Audit Committee have provided the information disclosed hereinabove.

Reliance on Certain Exemptions

We confirm that we have are not relied on any exemptions identified in section 4 or 5 of Form 52-110F1 during our most recently completed financial year. We further confirm we have not relied on section 3.8 of Regulation 52-110 during our most recently completed financial year.

External Auditor Service Fees

	Year Ended December 31			
	2019 (CAN$)		**2018** (CAN$)	
Audit Fees	406,900	(83.4%)	382,100	(82.3%)
Audit-Related Fees	38,600	(7.9%)	37,000	(8%)
Tax Compliance and Preparation Fees	6,700	(1.4%)	7,000	(1.5%)
Other Fees	35,600	(7.3%)	38,100	(8.2%)
TOTAL FEES	487,800	(100%)	464,200	(100%)

"audit services" – these services relate to the audit of our audited annual financial statements and other regulatory audit services

"audit-related services" – these services relate to professional services regarding interim financial statements

"tax compliance and preparation services" – these services relate to tax compliance and preparation of income tax returns, and

"other services" – these services relate to accounting and financial reporting services pertaining assurance and advisory services for International Financial Reporting Standards (known as *IFRS*) obligations and conversions, due diligence services related to mergers and acquisitions, internal control reviews and tax services other than tax compliance and preparation services.

ITEM 20 – TRANSFER AGENT AND REGISTRAR

Our transfer agent and registrar is Computershare Trust Corporation of Canada, 1500 Robert-Bourassa Boulevard, Suite 700, Montréal, Québec, H3B 3S8. Our registers of transfers are located at the foregoing address.

ITEM 21 - ADMINISTRATIVE OFFICES

Listed below are the addresses of the head offices of SEMAFO and its material subsidiaries.

CANADA (Corporate office)

SEMAFO Inc.

100, Alexis-Nihon Boulevard
Suite 700
Saint-Laurent (Québec) H4M 2P3
Telephone: (514) 744-4408
Fax: (514) 744-2291
Email: info@semafo.com
Web Site: www.semafo.com

BARBADOS

Semafo (Barbados) Limited

The Gables
Haggatt Hall
St-Michael, Barbados, West Indies

BRITISH VIRGIN ISLANDS

Joint Venture BF1 Inc.

Maples Corporate Services (BVI) Limited
Kingston Chambers, PO Box 173, Road Town
Tortola, British Virgin Islands

BURKINA FASO

SEMAFO Boungou S.A.
SEMAFO Burkina Faso S.A.
Birimian Resources SARL
Mana Mineral SARL

Sector 22, Babanguida Avenue
Benda Street, Door # 211
01 PO Box 390
Ouagadougou 01, Burkina Faso
Tel. (011) 226.50.36.95.92
Fax: (011) 226.50.36.95.87
Email: info@semafo.com

ITEM 22 - ADDITIONAL INFORMATION

Additional information relating to SEMAFO can be found on SEDAR at www.sedar.com and on our website at www.semafo.com.

Additional information, including directors' and officers' compensation, principal holders of our securities and securities authorized for issuance under equity compensation plans is contained in our most recent management information circular.

Additional financial information is provided in our audited consolidated financial statements for the year ended December 31, 2018 and the corresponding Management Discussion and Analysis.

ITEM 23 – FORWARD LOOKING STATEMENTS

As mentioned in ITEM 1 – GENERAL MATTERS, this AIF contains forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and assumptions and accordingly, actual results and future events could differ materially from those expressed or implied in such statements. You are hence cautioned not to place undue reliance on forward-looking statements. These forward-looking statements include statements regarding our expectations as to the market price of gold, production targets, timetables, mining operation expenses, capital expenditures and mineral reserves and resources estimates. Forward-looking statements include words or expressions such as “committed”, “building”, “leveraging”, “development”, “objective”, “expect”, “should”, “investigate”, “expand”, “forecast”, “will”, “plan, “in order to”, “2019 exploration budget”, “preliminary”, “suggest”, “further”, “target”, “proposed”, “would”, “appearing”, “designed to”, “continue”, “advance”, “goal” and other similar words or expressions. Factors that could cause future results or events to differ materially from current expectations expressed or implied by the forward-looking statements include the ability to build value through responsible mining and leverage our development pipeline, the ability to ensure smooth internal operations at our mines, the ability to increase cash flow through access to higher-grade ore from Siou underground and Siou open pit, the ability of the government to enhance security in the Boungou region, the ability to execute on our 2020 exploration focus, the ability to produce between 42,000 and 46,000 ounces of gold at Boungou at an AISC of between $530 and $560 per ounce during the initial three-month phase, the ability to utilize at Boungou during the initial three-month phase the on-site supplies inventory with limited deliveries of new supplies, the ability to transition to an airplane for the transportation of employees at Boungou when the construction of the airstrip has been completed, the ability to restart mining at Boungou in the fourth quarter while continuing to process stockpiles, the ability of the security to improve on the public road to Boungou and in the surrounding region to increase the frequency of deliveries required to operate after the initial three months, the ability to finalize discussions with the authorities regarding the necessary security plan, the ability to replace African Mining Services at Boungou by the fourth quarter, the ability to extract approximately 600,000 tonnes of ore from Siou underground at an average grade of 5.5 g/t Au and 1.4 million tonnes from the Siou and Wona open pits an average grade of 2.5 g/t Au, the ability to reach full production at Siou underground in the first quarter of 2020, the ability to meet our initial exploration budget of $7 million, the ability to add additional underground resources at Bantou, the ability to test prospective areas outside of the existing resources at Bantou, the ability to meet our resource goal of 2.5-3.0 million ounces at Bantou by the end of 2020, the ability to increase the initial 2020 exploration budget at Bantou, the ability of our 2020 exploration program at Boungou to identify new near-mine resources, the accuracy of our assumptions, fluctuation in the price of currencies, gold prices and operating costs, mining industry risks, uncertainty as to calculation of mineral reserves and resources, delays, political and social stability in Africa (including our ability to maintain or renew licenses and permits) and other risks described in SEMAFO’s documents filed with Canadian securities regulatory authorities. You can find further information with respect to these and other risks in filings made with the Canadian securities regulatory authorities and available at www.sedar.com. These documents are also available on our website at www.semafo.com.

Forward-looking statements while based on management’s reasonable estimates and assumptions as at March 3, 2020 involve known and unknown risks and uncertainties which may cause our actual results, performance or achievements to differ materially from any of our future results, performance or achievements expressed or implied by forward-looking statements. All forward-looking statements in this AIF, whether a reference to the present section is made or not, are qualified by this cautionary statement. Investors are cautioned that the foregoing list of factors is not exhaustive of the factors that may affect the actual outcome of events that are the subject of forward-looking statements. These and other factors should be considered carefully. See ITEM 11 - RISK FACTORS. We disclaim any obligation to update or revise these forward-looking statements, except as required by applicable law.

SCHEDULE A - GLOSSARY OF TERMS

The following glossary gives the meaning of certain technical terms.

"**arsenopyrite**"	Sulphidic mineral usually formed in veins at high temperature, but also through contact metamorphism. Silver white colour on crystal faces and steel gray on fresh breaks. Same as mispickel.
"**BLEG**"	Bulk Leach Extractable Gold technique. Very sensitive analytical method for gold whereby all the gold contained within a 1-2 kilogram geochemical survey sample is extracted by cyanide leaching. A very low detection limit may be achieved: the quoted limit of the method is 0.5 parts per billion of gold. The gold content of stream sediments diminishes downstream of the source, so the greater the sensitivity of the assay method used, the more widely the samples may be spaced. BLEG sampling therefore cuts down on the number of samples required to test a given area and effectively increases the survey efficiency.
"**carbon-in-leach**" or "**CIL**"	Metallurgical process of gold extraction. Involves the osmotic use of activated carbon particles during the leaching phase to absorb gold.
"**diamond drilling**" or "**DD**"	Drilling method by which a solid core is extracted from depth, for examination on the surface. A diamond drill bit composed of industrial diamonds set into a soft metallic matrix is mounted onto a drill stem, which is connected to a rotary drill. Water is injected into the drill pipe, so as to wash out the rock cuttings produced by the bit. The motor-driven drill, by rotary action (and washing) causes a core to be extracted inside the barrel and taken to the surface.
"**felsic**"	Descriptive term for light-coloured rocks containing a predominance of feldspar and silica, or the light-coloured silicate minerals themselves.
"**lateritic**"	Descriptive term for residual, oxidized deposits formed in tropical and subtropical terrains by the weathering action of the alternation wet and dry seasons.
"**mineral reserves**"	Mineral reserves are subdivided in order of increasing confidence into probable mineral reserves and proven mineral reserves. Probable mineral reserves have a lower level of confidence than proven mineral reserves. Mineral reserves are the economically mineable part of measured or indicated mineral resources demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. Mineral reserves include diluting materials and allowances for losses that may occur when the material is mined. Mineral reserves are this part of mineral resources which, after the application of all mining factors, results in an estimated tonnage and grade which, in the opinion of a qualified person making the estimates, is the basis of an economically viable project after taking account of all relevant processing, metallurgical, economic, marketing, legal, environment, socio-economic and government factors. Mineral reserves are inclusive of diluting material that will be mined in conjunction with the mineral reserves and delivered to the treatment plant or equivalent facility. The term "mineral reserves" does not necessarily mean that extraction facilities are in place or operative or that all

governmental approvals have been received. It does mean that there are reasonable expectations of such approvals.

"**proven mineral reserves**" "Proven mineral reserves" are the economically mineable part of measured mineral resources demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

Application of the proven mineral reserves category implies that a qualified person has the highest degree of confidence in the estimate with the consequent expectation in the minds of the readers of the report. The term should be restricted to that part of the deposit where production planning is taking place and for which any variation in the estimate would not significantly affect potential economic viability.

"**probable mineral reserves**" "Probable mineral reserves" are the economically mineable part of indicated, and in some circumstances, measured mineral resources demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

"**mineral resources**" Mineral resources are subdivided, in order of increasing geological confidence, into inferred, indicated and measured categories. Inferred mineral resources have a lower level of confidence than that applied to indicated mineral resources. Indicated mineral resources have a higher level of confidence than inferred mineral resources, but have a lower level of confidence than measured mineral resources.

Mineral resources are a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of mineral resources are known, estimated or interpreted from specific geological evidence and knowledge.

The term "mineral resources" covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which mineral reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The expression "reasonable prospects for economic extraction" implies a judgment by a qualified person with respect to the technical and economic factors likely to influence the prospect of economic extraction. Mineral resources are an inventory of mineralization that, under realistically assumed and justifiable technical and economic conditions, might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.

"**measured mineral resources**" "Measured mineral resources" are that part of mineral resources for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and

drill holes that are spaced closely enough to confirm both geological and grade continuity.

Mineralization or other natural material of economic interest may be classified as measured mineral resources by a qualified person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

"**indicated mineral resources**" "Indicated mineral resources" are that part of mineral resources for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Mineralization may be classified as indicated mineral resources by a qualified person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. A qualified person must recognize the importance of the indicated mineral resources category to the advancement of the feasibility of the project. An indicated mineral resources estimate is of sufficient quality to support a preliminary feasibility study which can serve as the basis for major development decisions.

"**inferred mineral resources**" "Inferred mineral resources" are that part of mineral resources for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Due to the uncertainty of inferred mineral resources, it cannot be assumed that all or any part of inferred mineral resources will be upgraded to indicated or measured mineral resources as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred mineral resources must be excluded from estimates forming the basis of feasibility or other economic studies.

"**property**" Descriptive term for interests in a permit to exploit or prospect for mineral resources on a given area.

"**Qualified Person**" An individual who is an engineer or geoscientist, with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, has experience relevant to the subject matter of the mineral project and technical report, and is a member in good standing of a professional association, as defined in National Instrument 43-101.

"**reserve**" or "**ore**" Natural aggregate of one or more minerals which, at a specified time and place, may be mined and sold at a profit, or from which some part may be profitably separated.

"**reverse circulation**" **or** "**RC**"	Drilling method whereby the rock is broken into chips using a rotary method of penetration. A double-walled drill pipe is used and compressed air is forced down the space between the two pipes to the drill bit. The drilled chips are flushed back up to the surface through the center tube of the drill pipe.
"**shear**"	Dislocation by lateral slip of one part of a body relative to another, often occurring on a regional scale. A fracture in rock similar to a fault.
"**silica**"	Silicon dioxide.
"**silicification**"	Total or partial replacement of rocks or fossils by silica (such as quartz or chalcedony).
"**strike**"	Course or bearing of a bed or layer of rock.
"**sulphide**"	Mineral compound of sulphur and a metal.
"**vein**"	Occurrence of ore with a regular development in length, width and depth.

Metric Equivalents

Conversion rates from imperial to metric measures and from metric to imperial measures are provided below.

Imperial Measure	Metric Unit	Metric Measure	Imperial Unit
1 acre	0.4047 hectare	1 hectare	2.4711 acres
1 foot	0.3048 meter (m)	1 meter (m)	3.2808 feet
1 mile	1.6093 kilometers (km)	1 kilometer (km)	0.6214 mile
1 ounce (troy)	31.1035 grams (g)	1 gram (g)	0.0322 ounce (troy)
1 pound	0.4536 kilogram (kg)	1 kilogram (kg)	2.2046 pounds
1 short ton	0.9072 metric tonne (t)	1 metric tonne (t)	1.1023 short ton
1 ounce (troy) / short ton	34.2857 grams / metric tonne	1 gram / metric tonne	0.0292 ounce (troy) / short ton

Gold Prices

The following table sets forth the annual high, low and average price of gold for the periods indicated, as well as the price of gold at the end of each such period, as determined on the London Bullion Market (US dollars per ounce).

Gold Prices $/oz	2019	2018	2017	2016	2015	2014
High	1,546	1,355	1,346	1,366	1,296	1,385
Low	1,270	1,185	1,151	1,077	1,049	1,142
Average	1,393	1,268	1,257	1,251	1,160	1,266
End of period	1,515	1,279	1,291	1,151	1,060	1,206

Currency Exchange Rates

Except as otherwise indicated, all dollar amounts set forth herein are expressed in United States dollars. $ means United States dollars.

The following table sets forth the exchange rates of Canadian dollars to US dollars for the periods indicated. The average exchange rates are presented for these periods, as well as the exchange rate at the end of each such period. These exchange rates are expressed in Canadian dollars and represent the noon buying rate for US dollars at the Bank of Canada.

	2019	2018	2017	2016	2015	2014
Average	1.3265	1.2960	1.2981	1.3262	1.2777	1.1038
End of period	1.3016	1.3630	1.2551	1.3427	1.3884	1.1601

SCHEDULE B – MANDATE OF THE AUDIT COMMITTEE

1. Duties

The role of the Audit Committee (the "Committee") of SEMAFO Inc. (the "Corporation") is to assist the Board of Directors (the "Board") in its oversight of:

- The identification of the principal business risks and, with the exception of environmental and health & safety risks, the establishment of appropriate policies and risk management systems aimed at managing these risks
- The integrity of the Corporation's internal control, information and financial management systems
- The establishment of policies and systems aimed at increasing accountability, ensuring compliance with applicable laws and with auditing and accounting principles.

The Committee does not have the mandate of planning or conducting a financial audit, nor is it responsible for determining whether the financial statements are complete and fully reflect the Corporation's situation or whether accounting principles applicable to the Corporation have actually been applied. In these respects, after having carried out the verifications dictated by the circumstances, and having ensured the existence of adequate internal controls, the Committee relies on the accounting and financial expertise of the President and Chief Executive Officer and the Chief Financial Officer of the Corporation who are responsible for the integrity of the information submitted to the Committee and to the Board.

The independent auditor, under the supervision of the Committee, is responsible for auditing the Corporation's financial statements. He or she reports on the results of the audit directly to the Committee.

The Committee fosters frank and open dialogue with the independent auditor, management, and the Corporation's accounting personnel.

In fulfilling its duties, the Committee:

Financial Reporting

- Reviews the results of the independent audit firm's reviews of interim financial statements, if any, and annual audit and is responsible for resolving any disagreement with management
- Reviews and recommends to the Board for approval the annual audited financial statements and related Management's Discussion and Analysis of financial and operating results
- Reviews and recommends to the Board for approval the Annual Information Form
- Reviews and recommends to the Board for approval the quarterly financial statements and related Management's Discussion and Analysis of financial and operating results
- Reviews and recommends to the Board for approval the Corporation's earnings press releases
- Reviews management process to maintaining and evaluating financial disclosure controls and procedures and internal control over financial reporting.

Independent Auditors

- Periodically assesses the independent auditor
- Recommends to the Board for consideration by the shareholders an independent audit firm to conduct an annual audit of the Corporation's financial statements
- Evaluates the independence of the independent audit firm
- Reviews an annual report from the independent audit firm elected by the shareholders regarding the independent audit firm's internal quality-controls procedures, material issues raised by the most recent internal quality-control review, or peer-review, of such firm, or by any inquiry or investigation by governmental or professional authorities respecting one or more independent auditors carried out by the firm
- Reviews the plan and scope of the annual audit engagement of the independent audit firm elected by the shareholders
- Recommends to the Board for approval the annual audit engagement fees of the independent audit firm elected by the shareholders

- Subject to the policy on approval of audit and non-audit services by the external auditors, approves all non-audit engagements of the independent audit firm elected by the shareholders.

2. Policies

The Committee must establish a procedure for the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters.

The Committee must also establish a procedure for the confidential and anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters.

The Committee must establish hiring policies regarding partners, employees and former partners and employees of the present and former independent audit firms elected by the shareholders.

3. Composition

The Committee is composed of at least three directors appointed by the Board for a mandate of one year or for any other period set by the Board.

All Committee members shall be independent directors and financially literate as prescribed by the Canadian Securities Administrators and determined by the Board.

4. Chair

The Chair of the Committee is appointed by the Board. In the event of the Chair's inability to attend a meeting, Committee members shall appoint a chair for such meeting.

The Chair of the Committee:

- Chairs all Committee meetings
- Ensures the fulfillment of the Committee's mandate
- Reports on Committee activities to the Board
- Ensures that this mandate is reviewed annually by the Committee members to recommend to the Board any appropriate changes.

5. Meetings

The Committee meets at least four times a year at locations, dates and times it determines.

The Chair of the Committee may convene a meeting at any time.

6. Organization

The Corporation's secretary acts as Committee secretary.

Before each Committee meeting, the secretary distributes the agenda and the information required for discussion and decision-making purposes. The secretary records the minutes of each Committee meeting in a register kept for this purpose.

7. Quorum and Decisions

The Committee quorum is the majority of Committee members.

Subject to the quorum being reached, the Committee makes its decisions by a majority of the votes cast by attending members.

8. Outside Advisors

In fulfilling its duties, the Committee may retain legal, accounting or other advisors.

SEMAFO Inc.

100 Alexis-Nihon Blvd., 7th Floor
Saint-Laurent, Québec
H4M 2P3 Canada
www.semafo.com

SEMAFO
INTERNATIONAL EXPERTISE®
HUMAN ADVOCACY